DOCUMENT RESUME

ED 093 141 EC 062 411

| | |
|---|---|
| AUTHOR | Mann, Philip H., Ed. |
| TITLE | Mainstream Special Education: Issues and Perspectives in Urban Centers. |
| INSTITUTION | Miami Univ., Coral Gables, Fla. |
| SPONS AGENCY | Bureau of Education for the Handicapped (DHEW/OE), Washington, D.C. |
| PUB DATE | [74] |
| GRANT | OEG-0-72-3999(609) |
| NOTE | 172p.; Proceedings of the University of Miami Conference on Special Education in Great Cities |
| AVAILABLE FROM | Council for Exceptional Children 1920 Association Drive, Reston, Virginia 22091 ($3.50, 10% off for 2-9 copies, 20% off for 10 or more copies) |
| EDRS PRICE | MF-$0.75 HC-$7.80 PLUS POSTAGE |
| DESCRIPTORS | Career Education; Classification; Conference Reports; Cooperative Programs; Equal Education; *Exceptional Child Education; Handicapped Children; *Institutes (Training Programs); Interagency Cooperation; Normalization (Handicapped); *Program Descriptions; Regular Class Placement; *Teacher Education; *Urban Education |

ABSTRACT

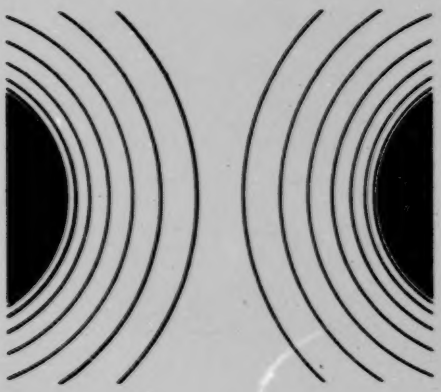
Provided are 19 presentations made to 200 participants in a conference on issues of mainstreaming, career education, and teacher education programs for urban handicapped children. Noted are four conference objectives such as improving communication within states between educational agencies and large city special education (SE) personnel. Discussed are SE in cities and procedures for planning the conference. Three papers address the issues of a right to education for all exceptional children, training needs of regular educators, and three D's (decategorization, declassification, and desegregation). Commented on in three papers are labeling and categorization, definitions and classification, and labeling and minority groups. The following are among seven educational agency projects and cooperative programs described: the Maryland design for SE services, Portland's public school prescriptive education program, East Cleveland's program for urban education, the Houston plan for retraining regular class teachers, the school/university teacher training program in Madison, and a California model for development centers. Discussed in five presentations are university teacher education programs which focus on the following areas: training of regular teachers in learning disabilities, computer assisted renewal education, training of regular teachers in SE, a clinical teacher model for interrelated SE areas, and programed environments for the mentally retarded. Future SE projects are reviewed in relation to a national technical assistance system. Reported is favorable evaluation by participants. (MC)

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

BEST COPY AVAILABLE

# MAINSTREAM SPECIAL EDUCATION

## Issues and Perspectives in Urban Centers



Edited by Philip H. Mann

Copies may be ordered from The Council for Exceptional Children, 1920 Association Drive, Reston, Virginia 22091. Single copy $3.50; discounts on quantity orders shipped to one address; 2-9 copies (10%); 10 or more copies (20%). Orders totaling less than $25.00 must be accompanied by remittance.

**Proceedings of the University of Miami**
**Conference on Special Education in the Great Cities**

Sponsored by
Bureau of Education for the Handicapped
U.S. Office of Education
Project No. OEG-0-72-3999 (609)

The project presented or reported herein was performed pursuant to a Grant from the U.S. Office of Education, Department of Health, Education, and Welfare. However, the opinions expressed herein do not necessarily reflect the position or policy of the U.S. Office of Education, and no official endorsement by the U.S. Office of Education should be inferred.

## CONTENTS

Prologue: Special Education and the Cities *1*
*Richard J. Whelan and Edward Sontag*

Preface *7*
*Philip H. Mann*

Historical Perspective *9*
*Malcolm D. Davis and Martin Dean*

**Section I: Issues and Commentaries** *15*

Introduction *15*
*Evelyn Deno*

Issue 1: The Right to an Education for all Exceptional Children *17*
*Richard A. Johnson*

Issue 2: The Training Needs of Regular Educators *20*
*Charles Meisgeier*

Issue 3: The Three D's: Decategorization, Declassification, and Desegregation *21*
*Ernest Willenberg*

Labeling, Classification, and Categorization *24*
*Patrick O'Donnell*

Definitions, Labels, and Classification *26*
*Leslie Brinigar*

Summary of Presentations *28*
*Evelyn Deno*

Labeling and Minority Groups – An Issue *37*
*Philip H. Mann and Jeffrey L. Brezner*

**Section II: State and Local Educational Agency Projects and Cooperative Programs** *44*

The Maryland Design for a Continuum of Special Education Services *48*
*Stanley I. Mopsik and Lucy Anne Hession*

Portland Public Schools' Prescriptive Education Program *60*
*Herman M. Frankel*

East Cleveland Programs for Urban Educational Redevelopment Through Self Direction *71*
*Lawrence A. Perney and George R. Eppley*

The Houston Plan – Retraining of Regular Classroom Teachers to Work with Handicapped Children Within the Regular Classroom Setting *77*
*Charles A. Meisgeier*

The Harrison-University Cooperative Resource Center *84*
*Richard A. Johnson and Rita M. Grismer*

Teacher Training: A Cooperative School/University Effort in the Madison Public Schools *94*
*Jean B. McGrew*

A Model: The Development Centers for Handicapped Minors in the California Public Schools *98*
*Al Tudyman and Leslie Brinegar*

**Section III: University Programs in Teacher Training** *106*

Training Regular Teachers in Learning Disabilities *110*
*Philip H. Mann and Rose Marie McClung*

Care: Computer Assisted Renewal Education *119*
*Keith A. Hall, H. Phillip Cartwright, and Harold E. Mitzel*

Training Regular Classroom Teachers to Provide Special Education Services: The Consulting Teacher Program *134*
*Phyllis F. Perlman and Wayne L. Fox*

Clinical Teacher Model for Interrelated Areas of Special Education *141*
*Louis Schwartz and Andrew Oseroff*

Programmed Environments for the Mentally Retarded *146*
*James W. Tawney*

**Section IV: Summary and Prospects for the Future** *154*

Technical Assistance: Some Possibilities *154*
*Maynard C. Reynolds*

Appendix: Conference Evaluation Summary *165*
*Bruce Balow*

## Acknowledgments

Sincere appreciation is extended to Miss Rose Marie McClung and Mr. Jeffrey Brezner of our staff for their efforts in helping to put together this manuscript.

BEST COPY AVAILABLE

# PROLOGUE:
## Special Education and the Cities

During the past several years the regular and special education communities have been moving through a series of rapid changes. Undoubtedly, the problems in the urban areas of this country have accentuated the changes taking place and have made the adoption of solution-seeking strategies for the special education community even more complex.

The three "Ls" – Leverage, Legislation, and Litigation – have moved the demands for quality programming beyond the ability and resources of the urban special education community.

The actions of parent groups have outpaced the professional community's ability to adequately respond to full service for all handicapped children. By exerting political pressure (leverage) on the state board of education, local school boards, and other legal entities, parents have persuaded those responsible to provide more comprehensive services for handicapped children. This strategy has often led to legislation that mandates full service. Failing to bring about a reversal in the exclusion process, parents have turned to litigation for final assistance. It is the courts that have provided the major incentive to providing education for all handicapped children.

The decision rendered in a suit brought by the Pennsylvania Association of Retarded Children (1971) in federal court made it mandatory that free public school education be provided for mentally retarded persons. Yet another suit of greater importance to special education is the *Mills* vs. *Board of Education* of the District of Columbia; this case expanded the implications of the Pennsylvania right to education ruling. This latter decision provided that all handicapped children, not merely the mentally retarded, have an equal right to education. Also, the *Mills* case is considered "a final and irrevocable determination of plaintiffs' constitutional rights" (Friedman, 1972). The Pennsylvania decision is based on a consent agreement and does not provide the legal precedence of the *Mills* judgment.

U.S. District Court Judge Joseph C. Waddy summarized the *Mills* case as follows: That no child eligible for a publicly-supported education in the District of Columbia public schools shall be excluded from a regular public school assignment by a Rule, Policy or Practice of the Board of Education of the District of Columbia or its agents unless such child is provided (a) adequate alternative educational services suited to the child's needs, which may include special education or tuition grants, and (b) a constitutionally adequate prior hearing and periodic review of the

child's status, progress, and the adequacy of any educational alternative (Abeson, 1973 p. 3).

The *Mills* decision mandates too that the handicapped be provided a regular public school assignment or with alternatives at public expense and with constitutionally adequate hearings. Thus each child of school age must be provided "... a free and suitable publicly-supported education regardless of the degree of the child's mental, physical or emotional disability or impairment..." (Abeson, 1973 p. 3). In other words, the excuse of insufficient funds is not adequate reason to exclude these children from their right to an education.

This sequence of events, compounded by other problems facing the entire educational community in urban areas, has placed tremendous burdens on urban special educators responsible for programming for handicapped children. The special educator has traditionally placed the majority of its services in the middle section of the continuum, or range, of handicapping conditions. The responsibility for educating the severely handicapped has been left to others or to no one. The child with moderate learning and behavioral problems who could be educated within the confines of the regular classroom has been, in far too many cases, either programmed inappropriately or not programmed at all. This spread in the coverage of a full continuum of program services has caught the urban special education administrator short in terms of adequately trained personnel, functional curriculums, and sound instructional models. This shortage of human and technological resources comes at a time when finances are severely strained. The courts, however, have indicated that a lack of financial resources is not sufficient reason to deny services to handicapped children.

Urban school districts confronted with the task of implementing comprehensive educational services for all handicapped children are bearing the brunt of the responsibility. There is a tremendous need to marshal the technological, human, and financial resources of state educational agencies, institutions of higher education, and federal education agencies to assist the urban cities in responding to this situation. It is this obvious need for assistance to the urban cities that provided the impetus for the Bureau of Education for the Handicapped (BEH), the National Center for the Improvement of Educational Systems' (NCIES) Leadership Training Institute, Special Education, to co-sponsor the Special Education and the Cities Training Institute. The purpose of this training institute was to establish a meaningful dialogue among state directors of special education, directors of special education in large urban centers, representatives of selected training institutions, and presenters representing current for-

ward looking and viable special education models. The institute was organized around the issue of "right to education" for all children, the training needs of regular and special educators, and the "three D" problem: Decategorization, Delabeling, and Desegregation.

The major topics for this training conference have been and continue to be target priority areas for the Division of Personnel Preparation (DPP), Bureau of Education for the Handicapped (BEH). The BEH objectives are:

> To assure that every handicapped child is receiving an appropriately designed education by 1980 (85% by 1978).
>
> To assure that by the year 1977 every handicapped child who leaves school has had career educational training that is relevant to the job market, meaningful to his career aspirations, and realistic to his fullest potential.
>
> To assure that all handicapped children served in the schools have sufficient trained personnel who are competent in the skills required to aid the child in reaching his full potential.
>
> To enable the most severely handicapped children and youth to become as independent as possible, thereby reducing their requirements for institutional care and providing opportunity for self-development.

The Division (DPP) utilizes its three basic grant programs to respond to the BEH priority areas. These are: program assistance grants to institutions of higher education, program assistance grants to state educational agencies, and the special project program.

Program assistance grants are used to increase the quantity and quality of teaching personnel and other special personnel for the education of handicapped children by providing funds to eligible institutions and agencies that have, or will develop, programs for the preparation of such personnel. The purpose of the special projects is to develop, implement, and evaluate training approaches that are basically new or which are significant modifications of existing programs. Projects include innovative approaches to the solution of major training problems.

Many areas under examination and review at this training conference are also under examination and review in the Division of Personnel Preparation.

### Training of Regular Educators

The training needs of the regular educator have been a major focus at

DPP. It is anticipated that approximately 20 to 30 grants will be made for academic year 1974-75 for this purpose. State education agencies and colleges and universities will submit applications for this area. A portion of the funds will be used to stimulate changes in teacher certification requirements. This would include responding to students who plan to become regular class teachers who will have as a portion of the preparation sequence some special education course work and related practicum experiences with handicapped children. It is anticipated that a significant portion of the grant funds will be used to conduct in-service preparation of practicing regular educators. This group will include teachers, principals, supervisors, administrators, etc. It is also anticipated that parents will also be able to participate in these sessions.

It has been noted that school districts and states have placed general educators in service programs for handicapped children. This occurs when state legislatures mandate service programs but neglect to strengthen programs that prepare qualified special educators. A Pavlovian type of response usually occurs. There is a massive effort to provide emergency in-service preparation programs. While it is necessary to meet such needs, the problem could be avoided by coordinated local and state planning. All too often colleges and universities are criticized for failing to respond immediately to a pressing local and state need when, in reality, it is a failure in total planning and program development between and among the various institutions and agencies.

### Examination of Level of Personnel Preparation

This issue is very crucial to the future planning of training programs in institutions of higher education and state education agencies. It is related to the merits, positive or negative, of preservice in contrast to in-service preparation. It is also related to the selection of surplus general educators and preparing them to function in service programs for handicapped children. The issue of whether training activities designed to meet new and emerging critical needs should be weighted toward in-service training rather than preservice education is being examined. In the future, personnel preparation programs in institutions of higher education will begin to respond adequately to the preservice needs of the special and regular education community. This factor will cause the field to review its capabilities to move into an in-service mode.

In-service preparation refers to continuing education of individuals who are already assigned to a given task. A teacher of the handicapped may desire, or be required, to take a new educational diagnostic course

and practicum. This would be an in-service activity. Another in-service activity would involve a regular education teacher who had been assigned to a special class without prior training, and who would be expected to enroll in course work and a practicum while teaching that class.

Preservice preparation refers to an individual who obtains prior preparation before assuming a task. For example, a regular educator may decide to start a special education certification or master's program on a full-time or part-time basis. This individual, however, would not assume a role in special education until the program was completed.

### Cooperative Statewide Planning

The emphasis on cooperative statewide planning is another major activity of DPP that correlates with two of the conferences purposes of improving communication within states among SEA, college and university, and large city special education personnel and to afford opportunity for SEA, LEA, and representatives of IHE training institutions to plan active and immediate approaches in seeking solutions to critical special education needs in large city school systems. DPP is beginning to plan for cooperative efforts that would bring project directors of federal program assistance or special project grants for the preparation of personnel to train handicapped children, representatives of state education agencies, and other appropriate agencies together for a series of conferences. The purpose of these conferences will be to discuss procedures to initiate or improve existing statewide planning among all public and private agencies and institutions throughout the states that prepare personnel to train handicapped children.

### The Need for this Conference

A training conference such as this is a vital entry point for the triad of the SEA, IHE, and local urban school districts to begin to work cooperatively. It is clear that various role changes must occur within this triad if a full continuum of services is going to be offered the handicapped child. Some of the role changes will and can be accomplished rather easily; others will result in major institution changes. The speed and ease in which these role changes are made, however, will depend a great deal on how well the purposes of the conference are met and the follow-up objectives are achieved. The Bureau of Education for the Handicapped anticipates being an active partner in this process. "Responsibility and accountability will be the hallmark of federal action in concert with local

and state decision makers at the local and state education departments and at the departments of special education in universities and colleges" (Herman, 1973 p. 148). This conference is a continuing link in this cooperative process.

**Richard J. Whelan,**
*Director, Division of Training Programs*
*Bureau of Education for the Handicapped*
*and*
**Edward Sontag,**
*Liaison Officer, Bureau of Education for the Handicapped*

## References

Abeson, A., Ed. A Continuing Summary of Pending and Completed Litigation Regarding the Education of Handicapped Children. Arlington, Va.: The Council for Exceptional Children's State-Federal Information Clearinghouse for Exceptional Children, 1973, pp. 1-5.

Herman, R. Leadership for the Handicapped. Minneapolis, Minnesota: The University of Minnesota Leadership Series in Special Education, 1973, pp. 141-151.

# PREFACE

More than at any other period in the history of mankind, at present there is a humanistic concern exhibited toward the atypical individual—for his education, his welfare, and especially his role as a contributing member in a changing society. The years have witnessed a trend from isolation coupled with a lack of concern to a period of separation with concern and more recently a movement toward a more integrated concept of education known as "mainstreaming." Paralleling this recent trend is a national concern for providing public school education for the multiply handicapped child or the more severely involved individual.

Large urban centers are finding that many of the well established categorical definitions of and physical arrangements for children are no longer relevant in this era of accountability. The advent of desegregation, along with efforts of vocal minorities to achieve better education for their children without the stigma of labeling or tracking has resulted in legal action that will require the reorganization and updating of educational practices

Educating handicapped children cannot be viewed in isolation from general teacher effectiveness. The whole area of competency-performance based teacher education addresses itself to the question of whom we are preparing teachers to teach. Special education over the years has established the fact that educating children with learning or behavioral disorders can and must be accomplished in the public schools. Many handicapped children, especially those who are severely involved, will require special classes. The dilemma in urban centers is not whether to have special classes, but what special education can do, working in concert with regular education, to provide the best environment for individual children, some of whom may need a self-contained environment. A related cogent area of concern and one which many are chary to explore in depth is educating that group of severely handicapped youngsters who are not now afforded a public school education due to admission restrictions. The legal and social implications of this area of need are far-reaching.

It is time for special education to stop criticizing the "mainstream" educator for his shortcomings and inadequacies in terms of providing for the atypical learner within regular classes. It is imperative that special educators determine with regular educators options pertaining to training, to sharing of responsibilities, to opportunities for close working relationships, and to identifying current technology and management

systems that have proven effective in providing a cascade of services for the handicapped.

The contributors to this volume have developed programs or systems that have been successful in dealing with the above-listed areas of concern. The concepts have to some extent withstood the test of time and are presently being implemented in educational settings throughout the country. One common denominator found in all the contributions is the notion that humanism in education can be achieved to a greater degree by providing "mainstream" education. In most instances this proved possible and beneficial for particular students who have been labeled handicapped. This also applies to those who are already failing in regular classes but who have not yet been labeled as handicapped.

The other common denominator found in all the presentations is a sincere belief in the need for reeducation and updating of "regular" educators at all levels in reference to the handicapped. This belief is accompanied by a desire to provide public schools with the best support systems available to aid them in offering improved and more humanistic education for the handicapped, and in so doing upgrading total educational services for all students.

**Philip H. Mann,**
*Director, Special Education*
*Developmental and*
*Technical Assistance Center*
*University of Miami*

## HISTORICAL PERSPECTIVE

The conference grew out of shared concern for the present critical needs in special education. The groups that were brought together as participants were invited because of the major roles they play in shaping special education programs in this country. The fruition of this conference was a direct result of planning and discussions over an extended period of time.

In 1971, the panel of consultants of the Special Education, Leadership Training Institute Bureau of Educational Personnel Development and the personnel of the Exceptional Children Branch, USOE, foresaw the emerging problems in the education of the handicapped in the "inner cities." They proposed a series of meetings of administrators of special education programs from the largest city school districts in the country and appropriate officials from USOE Bureaus charged with responsibilities relative to the education of handicapped children in Washington, D.C. to begin working together toward resolution and elimination of these problems.

They further proposed that an organization already in existence, the Council of Great City Schools, could serve as a vehicle for bringing together the desired personnel. This organization has as its membership the superintendents and boards of education of the twenty-three largest city school districts in the continental United States. Staff members occasionally join this group to discuss or research educational problems confronting urban communities.

It was felt that the B.E.P.D. would be the logical bureau in the U.S. Office of Education to serve as the catalyst since its objectives included the efficient use of educational personnel and the improvement of the quality of the preparation of that personnel.

The Special Education Leadership Training Institute funded by the Exceptional Children Branch funded the first meeting in San Francisco in May 1971. Line administrators of special education programs (associate superintendents, assistant superintendents, or directors of special education) in member cities of the Council of Great City Schools were contacted, and their response was enthusiastic. The purpose of this first meeting was to discuss the problems facing school administrators in meeting the needs of handicapped children in the inner cities. A second objective was to discuss working relationships with general administrators to provide direction of programs for these handicapped youngsters—the coordination of the education of the handicapped with regular education.

Dr. William L. Smith, then Acting Associate Commissioner of the Bureau of Educational Personnel Development, served as the "keynoter" for the conference with his speech "Special Education: The New Perspective." Dr. Malcolm D. Davis, Chief of the Exceptional Children Branch, delivered a major address on "Special Education for the Seventies and Beyond: A Redefinition." An in-depth discussion on the need for retraining of present regular and special education teachers and administrators followed and consumed the remainder of the two-day meeting.

It became increasingly clear that those charged with the responsibilities of administering special education programs in the large urban cities should continue to meet to analyze the many problems facing those communities as well as to develop broader understandings and to move aggressively toward the improvement of instruction and services for children with learning problems and other disabilities.

The representatives of special education administration from the member cities of the Council became a subcommittee on special education of the Council and submitted the following recommendations as a result of its two days' deliberations:

1. That the committee prepare a proposal, using research money, for a pilot study that would focus upon the preschool identification of the exceptional child, using a broad-based network of personnel, the involvement of appropriate specialists, and the generation of measuring instruments appropriate to the background of the child and capable of projecting his possible development.

2. That special education should be effectively meshed with the regular education framework in all possible arrangements. Within this operation special education should participate in the creation and maintenance of a total educational environment suitable for all children. The communications network should cross organizational lines as necessary and be continuous.

3. That special educators should regularly assess the capacity of the school to serve all children with special needs and provide better concepts and methodologies. The gradual reduction of excluded children should be a primary responsibility.

4. That the identification of children with special needs should be based upon a comprehensive identification system in which all persons close to the child act as finders.

5. That the instruction and service of exceptional children should be highly individualized and designed to meet needs and develop potential. Valid instruments and competent personnel must be utilized

in identification and in class assignments. Further, there should be a periodic evaluation of pupil achievement and program accountability.

6. That categorization as a way of allocating pupils to specialized programs and state reimbursement tied to these categories is indefensible. While it is difficult and can be expensive, the fashioning of differentiated programs weighed heaviiy in the assumption that pupil potential must be at the core of any proposals for reimbursable special education programs.

A preliminary proposal for a possible project was presented to the Bureau of Education for the Handicapped. The proposed project would have concentrated primarily on early childhood education for the handicapped, a most pressing need area for the constituent member city school districts. It had relevancy to a variety of Bureau functions in terms of its emphasis upon diagnosis as a research tool, training of regular classroom teachers, the use of media with handicapped children, and the provision of improved services to children with a variety of types of handicaps.

In essence, the project was designed to study systematically current diagnostic procedures and problems; to develop a classification system which is appropriate for the regular classroom teacher for the diagnosing and remediation of special problems; to develop efficient diagnostic procedures and instruments; to develop diagnostic training programs; and to begin to build a catalogue of materials and techniques for dealing with special problems in class.

Unfortunately, the project was not able to be funded at that time. It, therefore, became apparent that if some of the goals and objectives of the committee were to be met, the work of the committee would need to be funded by a small technical assistance grant since project funding did not appear possible in the immediate future. The Special Education, Learning Training Institute agreed to do this for at least the 1971-72 school year.

The committee met in Minneapolis in November 1971 to continue the discussion of establishing priorities for serving the handicapped as well as researching administrative models for special education in large city school districts. The Council, through its work on Management in Urban School Districts, proved to be of invaluable assistance.

At the conclusion of the two-day workshop, the committee made the following recommendations to the Board of Directors of the Council:

1. That the committee seek to resolve the disparity between federal, state, and local interpretations of USOE formal Title I ESEA

policy regarding the inclusion of handicapped students within the definition of "disadvantaged." The committee recommends that the Council of the Great City Schools seek clarification of OE Guidelines relating to the problem and disseminate the information to member city school districts and other agencies as appropriate.

2. That the Great City school systems move toward the integration of marginally handicapped pupils into regular education programs with emphasis upon staff development and the provision of supplementary specialized services.

3. That the committee on the Education of Exceptional Children seek technical, travel, and coordination support from the Office of Education to conduct workshop and needs assessment activities for the study of models relating to management, staff development, and administrative structures in special education.

The committee's work was beginning to have impact upon programs for the handicapped throughout the member cities, as attested by representatives from these cities. It was felt that spin-off from the work of the committee was also taking place in many other communities throughout the nation, as evidenced by meetings, workshops, programs at state, regional, and national conferences and in program changes themselves. The small financial investment in the work of the committee by the Special Education Learning Training Institute through B.E.P.D. was beginning to pay large dividends.

During 1972, efforts were pointed toward resolving policy questions regarding the administration of services to the handicapped (including reaction to the Policy Statement of the Council for Exceptional Children on this subject). Attention was also focused upon the need for improved communication between local school districts, State Departments of Education, and teacher training institutions.

In a continuing attempt to bring together regular and special education in the best interests of the handicapped, the committee made the following report to the Board of Directors of the Council when they met in Portland, Oregon, in May of 1972:

"The intent of the committee is to collectively commit to the proposition that specialized educational programs in the cities cannot only more adequately serve exceptional children, but can also more adequately serve Council school districts in their attempt to strengthen general education programs, and to provide equal educa-

tional opportunity. The committee proposes to work carefully with other staff and standing committees to seek their advice and assistance in furthering this commitment."

It was further stated that:

"the general mission of the committee is to identify and discuss critical issues related to improving the ability of city schools to provide varied, quality programs for exceptional children, to develop consensus among member districts on basic premises, goals, and objectives, and to assist the council and its member districts in developing policy and programs of an exemplary nature."

In November, the committee crystalized its concern over working relationships between local districts, state departments, and training institutions. It proposed to undertake a master project with help from the National Center for the Improvement of Educational Systems (NCIES) (formerly Bureau of Educational Personnel Development) and the Bureau of Education for the Handicapped.

The project would set up a consortium between the schools and universities that train teachers. A model training program could be developed that would involve general administration personnel from large city schools, regular class teachers, special education personnel, social and health care workers who are within the range of service delivery, teacher trainers in colleges and universities in the vicinity of member cities, and parents. Some of the areas of concern would be improved legislation and administrative guidelines; the coalition of health and social services with educational services; the revision of pupil testing, classification, and placement procedures; projections for the future in terms of changes in the needs of handicapped children, handicaps other than those the schools are presently prepared to deal with, and the impact on schools of providing individualized instruction for more children.

A proposed point of departure would begin with a conference composed of representatives from the Great Cities group, State Department Special Education Directors, and deans of schools of education. An ad hoc planning committee was composed of representatives of the Special Education Committee of the Council of the Great City Schools, the National Association of State Directors of Special Education, the LTI/Special Education, and representatives of the Exceptional Children Branch, NCIES, (formerly B.E.P.D.) U.S.O.E., and the Training Division/Bureau of Education for the Handicapped.

Invitations were sent to appropriate representatives, and the culmina-

tion was the Miami Great Cities Conference. It was an excellent beginning, and it is hoped that out of it will develop resolutions to critical problems and needs in special and general education.

**Malcolm D. Davis,**
*Chief, Exceptional Children Branch*
*National Center for the Improvement*
*of Educational Systems*
*and*
**Martin Dean,**
*Assistant Superintendent,*
*Special Educational Services Division*
*San Francisco Unified School District*

SECTION I

# ISSUES AND COMMENTARIES

*In this section Evelyn Deno provides a summary of the presentations and group discussions of the Great Cities Conference on Special Education held in Miami. Three major issues are discussed by some of the major figures in special education in the country. The concluding article involves the role of special education in the desegregation and integration process, both the legal and the educational implications.*

## INTRODUCTION

EVELYN DENO
*Professor, Department of Special Education*
*University of Minnesota*
*and Associate Director*
*Leadership Training Institute, Special Education*
*National Center for the*
*Improvement of Educational Systems*

Discussions of the Miami Conference on Special Education in the Great Cities centered around three issues:

1. The Right to an Education For All Exceptional Children
2. The Training Needs of Regular Educators
3. The "Three D" Problems: Decategorization, Declassification, and Desegregation.

Background on the three issues was presented in three different general sessions, with each session addressing one of the issues. This material was designed to provide a common base of information and illustration of implications to stimulate and focus later small group discussions around these issues. Initial presenters were:

Issue 1: The Right to Education For All Exceptional Children

| | |
|---|---|
| Richard A. Johnson | Director of Special Education<br>Minneapolis Public Schools |
| John Groos | Director, Special Education Section<br>Minnesota Department of Education |
| Frank Wood | Chairman, Department of Special Education<br>University of Minnesota |

| | |
|---|---|
| Van Mueller | Chairman, Department of Education Administration<br>University of Minnesota |

Issue 2: The Training Needs of Regular Educators

| | |
|---|---|
| Charles Meisgeier | Coordinator: Center for Human Resources and Educational Renewal<br>Houston Independent School District |
| Robert Howsam | Dean, College of Education<br>University of Houston |
| Don Partridge | Division of Special Education<br>Texas Education Agency |

Issue 3: The Three Ds, Decategorization, Declassification, and Desegregation

| | |
|---|---|
| Ernest Willenberg | Assistant Superintendent, Special Education Branch<br>Los Angeles City Unified School District |
| Patrick O'Donnell | Chairman, Dept. of Special Education<br>San Francisco State College |
| Leslie Brinegar | Associate Superintendent, Chief, Division of Special Education<br>California State Department of Education |

This section of the report summarizes the impressions left with one observer.

ISSUE 1

# THE RIGHT TO AN EDUCATION FOR ALL EXCEPTIONAL CHILDREN

RICHARD A. JOHNSON
*Director, Special Education*
*Minneapolis Public Schools*

Education has long been considered by many a privilege rather than a right for persons infirmity-bound by conditions of poverty, racial, or social status, or by personal, physical, or psychological traits classified as undesirable. Among those so classified are the handicapped of our country. That great discrimination and inequality of educational opportunity exist for this population has been well documented. For years many handicapped children have been subjected to systematic exclusion from public education, or have been served by second-class systems of education and training. Equality of educational opportunity for those labeled "handicapped" has not in the past been a reality and is not now extant.

Recently, however, several major efforts have helped to clarify the "civil rights" of the handicapped. Among these are the increased public awareness created by national legislation and use of public media, attempts by the CEC Policies Commission and other professional organizations to address this and related issues, and other efforts of governmental agencies, individual special educators, and state legislators. It is clear, however, that the current major emphasis on the rights of the handicapped has come about through the courts of our land.

Class action suits have been filed and won by parents in several states, and the major emphasis of these suits has been on the "equal protection" rights of the handicapped. Courts have made affirmative rulings that require states to provide, in effect, public school education or training for all handicapped children.

As these rulings and their implications become visible to the public and to educators, several major issues or questions become significant. Among these are the following:

1. Do the public schools have responsibility to serve all handicapped school aged children, regardless of type or degree of handicap, level of functioning, or residential location even for those who functioning is only on the autonomic level?

2. If so, what is meant by "serve"?

3. If not, what criteria can be applied to determine which children the public schools have responsibility for and what processes can be utilized to ensure that these criteria are uniformly and equitably applied, and that the Fifth Amendment "due process" rights of the handicapped are assured?

4. What is meant by "responsibility"? Does this term denote that the public schools shall actually provide direct educational services for all handicapped, or does it mean the public schools have the responsibility to *see* that every handicapped young person is receiving appropriate educational or training experience however and by whomever provided?

5. If the public schools have responsibility for provision and funding of direct services to all the handicapped, does this mean that schools will be taking over responsibilities and programs that were formerly operated and funded by welfare, and, if so, what arrangements can or should be made for a shift of funding resources?

6. Given the fact that education of its citizens is, by virtue of the Tenth Amendment to the Constitution, a responsibility of each state, does it follow that the charge "to serve all the handicapped" applies only to those states where (1) the state constitution requires it, (2) or where state or federal court rulings obtain?

7. How will training programs be created to support expanding community programs for the severely handicapped?

8. Are the states individually able to support the needed training programs? Do colleges have sufficient expertise? Or do we look to regional or national leadership?

9. Does the "right to an education" issue apply only to those severely handicapped who are receiving no formal program from a public school, or does it also apply to those handicapped provided education in their local schools, but who are under-served?

10. Should the state Departments of Education be given responsibility and authority for all educational programs for the handicapped in schools, institutions, and elsewhere as a means of achieving coordinated programming?

11. Given the fact that there is currently little consensus even among special educators on the issue of right to an education for *all* handicapped, and even less on resolution of related criticial questions, how might the even more difficult problem of obtaining across-agency consensus and specific focus be addressed?

12. Where school districts and states are required to create instant

programs, policies, and procedures in response to court order, what crisis management and program development expertise is there that could be marshaled to assist local personnel in meeting organizational and planning requirements?

13. Does lack of sufficient appropriations at either the state or local levels excuse states and local districts from providing for all the handicapped? If not, how do education agencies, especially the hard-pressed central cities, obtain the necessary dollar resources?

These and other questions related to ensuring the rights of the handicapped to free public education require extensive analysis. Local school officials and board members, state education agency personnel, training program personnel, and USOE executives need to share information and perspective on these issues, to the end that some clarifications occur, and that strategies be outlined to assist schools and related agencies to develop plans and programs necessary to provide for the constitutional rights of the handicapped.

# THE TRAINING NEEDS OF REGULAR EDUCATORS

CHARLES MEISGEIER

*Coordinator: Center for Human Resources and Educational Renewal*
*Houston Independent Schools*

Within the past two or three years, the institutions of higher education and state and local educational agencies have been struggling with the problem of providing adequate training opportunities and models to support and assist in the implementation of new designs for special education. But the problem is extremely complex, and the emerging designs are creating training problems and demands for change that place great stress on all three systems. One factor seems clear: the emerging designs require a whole new series of cooperative ventures among personnel of all three systems.

The problem would be difficult enough for special education to make internal changes; however, the emerging designs for delivery of special education services are part of a refashioning of the total educational system and thus must involve the total educational system. The changing environment of the schools is creating new interface problems for both special and regular education. Line staff responsibilities are becoming clouded. Both regular and special educators are looking at the generic competencies that teachers need to possess in new ways. No longer is the training of teachers or special personnel clearly the responsibility of one group or the other. Territories are being invaded. Both regular and special educators are looking again at the generic and special skills that teachers should have and at who will train them. The changing role of teacher from being confined to a self-contained class to participating on teams, from the role of dispenser of information to facilitator or advisor, has created new interfacing problems.

Other questions that need to be addressed are:

What are the elements that have to be involved in any effort to mount new training programs for special education (teaching organizations, state department personnel, etc.)?

What kinds of new organizational structures may need to be created to support new training demands?

Assuming that all parties desire to participate in redesigning training programs, what forces tend to support or restrain the development of new training efforts?

ISSUE 3

# THE THREE D'S: DECATEGORIZATION, DECLASSIFICATION, AND DESEGREGATION

ERNEST P. WILLENBERG

*Assistant Superintendent, Special Education Division*
*Los Angeles Unified City School District*

Historically, exceptional individuals derive their labels by way of medical diagnosis. The child without vision was diagnosed as blind; the child without hearing, deaf; the child with intellectual deficits, mentally deficient; and so forth. There followed the grouping of such individuals for purposes of treatment, care, custody, and education. The assumption was that each diagnosis prescribed a certain course of action in treatment, social management, and education. Initially, social management and education required the separation of the child from his family and removal from the local community. Generally, the blind, deaf, mentally retarded, and other handicapped children had to be sent away to state institutions if they were to be served at public expense. In many cases, institutionalization of the child was an approved social action to provide respite for the child's family and to remove an embarrassing member from his home and local community. It was considered an act of compassion to establish separate cultures and societies for certain groups of handicapped individuals. For example, the culture of *indigency* was perpetuated for the blind; the culture of the *dumb* was associated with the deaf; and society's "colonies" were established for the mentally retarded. Although these examples are the extremes, they typify historically the negative subculture position of most handicapped persons either in the sense of being objects of pity, embarrassment, or some degree of revulsion or fear.

Since World War II there has been a veritable tidal wave of reaction to the traditional methods of separating, isolating, and institutionalizing divergent members of society. Humanitarian concern for the rights of the individuals has been given strong support by economists who became alarmed at the burgeoning costs of institutional programs. Nationwide, state after state instituted statutory provisions for the education and care in local communities of the handicapped theretofore provided for only in state residential facilities. This phase represented the most extensive move toward decentralization in the history of public services for handicapped children. The impact of deinstitutionalization continues to be felt

by the thousands of school districts and local governmental jurisdictions charged with extending their general services to a segment of the population previously not included. Thus, local school districts, health departments, and so forth were confronted with serving individuals previously under the jurisdiction of a separate state authority. The movement required a change in rationale for service—one that emphasized inclusion rather than exclusion; one that asserted the inherent worth and dignity of human life as opposed to a scale of individual value based upon the potential for productivity.

The next phase is upon us in the environment of the local school. It is no longer sufficient merely to make provisions for the handicapped by reinstitutionalizing programs around their diagnostic labels. Separate special day schools, centers, and classes have been indicted as offending arrangements responsible for further retarding and dehumanizing certain children whose prospects would be much brighter in the environment of the "normal" pupil population. The clarion cry has become "Decategorize, Declassify, Desegregate—Mainstream!"

## The Issue

Since labeling, categorization, and grouping of pupils around diagnostic classifications has become associated with personal devaluation, low motivation, and poor achievement, it is contended that such terminology and grouping of pupils for service tends to thwart the basic goal of special education in the local public school. Instead of fostering the inherent worth and dignity of the exceptional individual, the system tends to memorialize his exceptionality. The remedy sought—Mainstreaming—is represented to have similar values for the handicapped as integration is represented to have with various racial and ethnic groups. While there is a concensus that from negative labels, positive images do not necessarily flow, some would point out that many of the social and educational problems of deafness are associated with the deaf no matter how one deals with the labels. The same could be said of the blind, mentally retarded, and other exceptional individuals. It would be argued that the essential task is proper classification and programming rather than declassification; that mainstreaming as a total solution tends to oversimplify and, in the final analysis, glaze over the complexity of individualizing instruction from a broad array of educational strategies.

## The Problem

After one disposes of all the shibboleths, the catch phrases and the

gans, the problem of the exceptional individual in the local school tem is to individualize his instruction in such a manner as to enable n to achieve his potential, whatever that may be, and to provide an vironment that fosters understanding and acceptance of the concept of worth and dignity of the human individual, without qualification cause of race, creed, religion, national origin, culture, financial status, ial, physical, emotional, or intellectual condition. In our search for swers it is well to know first of all what the problem is before pre-ibing the solution. It may be that the ultimate goal for each excep-nal individual will be obtained from the array of solutions applicable all children.

### Questions on Decategorization

1. Instead of categorizing pupils and providing programs based upon eir diagnostic categories, what better alternatives do we have to offer r instructional grouping and programming?
2. Removal of a label doesn't eliminate the fact that the child is still a vergent (exceptional) individual. What are the change agents for the gative images associated with the divergency, whatever it may be?
3. Much of our public and financial support for special education ograms has been dependent upon "causes" associated with specific tegories of human conditions. How do we retain the support of our ecial interest groups while we deemphasize or repudiate the validity of e categorical thrust in the context of educational programming?

# LABELING, CLASSIFICATION, AND CATEGORIZATION

PATRICK A. O'DONNELL
*Chairman, Department of Special Education*
*California State University, San Francisco*

Categorical programming in special education has encouraged universities to develop fragmented islands of expertise for preservice training of professional personnel. Neophytes are systematically inducted into quasi-disciplines that have been created as a response to conceptual delineations between types of handicapping conditions. Supported by credential requirements and the availability of job opportunities by categories, university staffs, in true Parkinsonian fashion, have engaged in the elaboration of techniques, methods, and principles which are supposedly unique to the teaching of children with particular categorical handicaps.

If the university is now to develop more generically trained personnel, we must find and define a different base around which our departments and programs can be organized.

1. Competencies needed by teachers in noncategorical programs must be identified.

2. Common educational needs of exceptional children must be specified, and instructional strategies for meeting these needs must be developed.

3. Teacher-educators must develop more broadly based expertise and concentrations. Instructionally related groupings of faculty (program planning, instructional technology, evaluation, etc.) is one alternative to the present division of labor by category of handicaps.

4. Institutions of higher education must assist state and local educational agencies in defining "low incidence" categories and in upgrading services to these children. The needs of all exceptional children cannot be met in generic programs.

5. Universities must insist that states develop certification patterns that provide for teachers who are prepared for generic programs as well as for specialized teachers who are prepared for instructional roles in "low incidence" programs.

6. Departments of Special Education must work with local educational agencies toward the development of practica that meet the needs of students preparing for work with generically structured pro-

grams. Existing patterns for practica generally fail to provide adequate breadth or depth to meet the needs of teachers assigned to generic programs.

*uestions:*

1. On what basis can we differentiate between children who can function best in generic programs and children who require highly specialized structional programs?
2. What competencies, if any, are needed by all students preparing for ireers in special education?
3. How can present university faculty be retooled to function in nerging generic programs? Is there a need for reeducation?
4. To what degree must university graduate programs be coordinated ith existing state certification requirements?
5. What means can the state agency use to insure that university rograms have adequate freedom for innovative program development?

# DEFINITIONS, LABELS, AND CLASSIFICATION

LESLIE BRINEGAR
*Associate Superintendent, Special Education*
*California Department of Education*

Through definitions, labels, and classification, exceptional pupils were brought to the attention of legislators and school personnel. Resources then were focused for their education. Classification permitted a controlled development of special education. Eligibility standards required a study of the needs of specific types of individuality, directing that such individuals' education be provided in appropriate settings and under teachers trained in specific philosophies and techniques.

The classification system has been constructed by an additive process but has not sufficiently changed as program development has been refined. An important current trend is the removal of labels from handicapped children in the school system. At present under most state laws it is necessary to categorize children in order to provide needed special education services. It should not be necessary to place a stigmatizing label on these children in order for them to receive equal education opportunity.

Laws should relate only to "exceptional individuals." Present classifications (physically handicapped, mentally retarded, educationally handicapped, etc.) should not be used to separate funding and legal requirements. Laws should provide the opportunities for any exceptional individual to benefit from appropriate services regardless of exceptionality; thus, only a single legal classification should be necessary to cover all exceptional individuals. Exceptional individuals should be defined in educational terms.

A subclassification system that emphasizes program services primarily and child categories secondarily should be retained since information regarding numbers, program location, and progress by type of exceptionality is needed for planning, data, and reporting purposes. An important difference between the current system and the subclassification proposed is an emphasis upon programs, not pupils. In order to qualify for special educational services a child need only be identified as exceptional; he then may be placed in any program appropriate to his needs.

A funding system that protects the integrity of "categorical purposing" and which permits a variety of services without labeling of pupils appears to be not only desirable but attainable at this period in the evaluation of special education services for exceptional children.

*Starter Questions:*

1. Should special education programs be operated from the base of a single legal classification, and can the special purpose funding required be maintained without loss?

2. Should program components (i.e., special purpose grouping, resource services, special classes) be operated on a fully free and flexible basis to allow noncategorization or categorization as determined locally?

3. Should the special education classification system relate primarily to program components or services rather than to classes, groups, categories, or types of children?

4. Is the delivery system sufficiently capable (i.e., are sophisticated programmers and clinical teachers available in quantity) to effectively handle a completely free and flexible system which at the same time will assure, within each state, a *good* education for *all* exceptional children?

## SUMMARY OF PRESENTATIONS

### EVELYN DENO

Dr. Johnson led off the general session panel presentation on the issue of the exceptional child's right to equal educational opportunity. He noted that, although the courts have established that deviant children have a right to educational opportunity as long as opportunity is provided for other children, important implementation questions remain to be resolved. Central questions are: (1) is there *any* level of disability which the schools are exempt from serving, and (2) what is meant by "serving"? A host of technical and management problems flow from these questions. They defy easy answer because both technological lacks and social-political factors are involved.

John Groos confirmed that most state education agencies will need to make fundamental changes in how they try to assure access of all children to appropriate service. State Education Agencies (SEAs) share with local agencies the responsibility to determine how service needs are best met and how high quality service shall be defined. He ascribed to the principle that fiscal support of local district service should be contingent upon quality of performance, including district faithfulness in preserving equal opportunity. He described how the Minnesota Education Agency is modifying its quality control procedures so state fund granting will be contingent upon presentation of an approvable program. Local school districts will have much latitude in design of how service will be rendered as long as critical operating criteria are met. These criteria include such elements as adequate needs assessment capability, capacity to develop and carry out service tailored to individual needs and goals, adequate means of evaluating service effectiveness, and means of assuring that service is available to all those requiring help.

Dr. Wood noted that the pressure for education for all that is now receiving much support through recent court actions is a tribute to successful demonstration that many children formerly thought ineducable can in fact learn. He proposed that institutions of higher education have responsibility to pilot test new methods and explore what is possible in areas of ignorance that limit education's ability to provide equal opportunity for all children.

Dr. Mueller expressed the opinion that the major arena of change has to be the regular education system. He predicted that the New Jersey court suit of Robinson vs. Cahill may have even greater impact than the

Pennsylvania and other earlier class action suits. The Wisconsin court case which challenges the state's right to compel Amish children to attend school highlights the need to examine the validity of the compulsory school attendance requirement for all children. Does a child have the right *not* to attend a particular school? Do parents have a right to education of their choice for their children since our laws generally assume children "belong" to their parents? The issue of compulsory attendance as opposed to compulsory education calls for careful examination. There is attendant need to consider whether a child's right to education should be stated in minimal terms or in some more idealized terms.

Dr. Mueller contended that the problems of Great City school systems were not just financial, that much could be accomplished through monies already available that were not being deployed to the best possible effect. He warned that the schools already constitute a heavy public investment, that the pool of economic resources is not infinite, and that demands on funding sources are increasing as costs rise higher even without program expansions. Special education, like regular education, is going to have to document that the money it invests shows a commensurate benefit to children and society.

Dr. Mueller questioned how much of an investment higher education institutions should continue to make in preservice education, given the present decline in school enrollments and the already existing oversupply of trained teachers. Staff cutbacks are more likely to be the order of the day in the years immediately ahead than staff increases. As staff reductions are made and fewer new, recently trained teachers are hired, school staffing patterns will include a higher and higher proportion of teachers whose preservice education is further behind them. Under these circumstances it seems essential that colleges shift some of their investment in preservice education to providing more continuing education opportunities for education personnel already at work in the schools.

Presenters on the issue of professional preparation described how personnel training in Texas is being related to the statewide changes in special education service delivery being promoted through the Texas Education Agency's Plan A. This system assumed that *all* children have right to equal educational opportunity and that preserving this right demands service tailored to individual needs without denigrating labeling or unessential segregation from the educational mainstream. These shifts in thinking and practice call for retraining of both regular and special educators to maximize the effectiveness of the regular-special education interface.

Dr. Partridge described the assumptions undergirding Plan A formulation and some of the implementation processes. Dr. Meisgeier outlined some of the problems the Houston school district is trying to resolve as a consequence of accepting these assumptions and how it is going about this. Dr. Howsam described how the University of Houston sees its obligations in this endeavor and how it is trying to adapt its resources and practices to this movement.

All of these speakers acknowledged the profound difficulties attending the comprehensive, system-wide changes their institutions were trying to bring about, but expressed belief that the importance of the issues involved did not permit any lesser commitment. They noted that movement away from categorical approaches to special education service delivery within local school systems was of such recent development that even teachers who have just completed their college preservice training in recent years may not be equipped by their training with the skills required to effectively serve within the newly emerging service framework.

Presentation of general background on the three issues was followed by small group discussion to examine the reality of the readings of climate made by the speakers and the service implications of these forces – if they seem likely to have impact.

Discussions of the heterogeneous, cross-role groups observed by this reporter led to the impression that the situation was reasonably well articulated by the issues presenters, except that many local (Great Cities) special education directors expressed belief that lack of funds constituted a greater impediment to movement than Dr. Mueller's statement regarding funding was interpreted by them to imply. Local Education Agency (LEA), State Education Agency (SEA), and Institutions of Higher Education (IHE) people acknowledged repeatedly that adjusting to the circumstances described would require a shift in their relationships and much enhanced communication among their agencies as well as more on-par communication with those they serve. If parents are given more voice in how their children shall be educated, either through more involvement in setting goals for their child's learning or by more choice in which school their children will attend, or even voice in whether the child is compelled to attend school at all, new problems are raised for educational systems. However, some change in the relationships involved could help to relieve the unrealistic expectancy that it is possible for any one school or program to meet the diverse needs and desires of all district residents.

Cross-role groups were sensitive to the profound implications of the shift from demand for preservice training to meet rapidly expanding staffing needs generated by mushrooming school enrollments to declining

need for more teachers and increasing need for continuing education. Belief was expressed that local school systems are having to change their practices to meet new field conditions faster than colleges are adapting their training practices to the new needs. Feeling was expressed that colleges can enjoy the luxury of delayed response because they are several steps removed from the daily crisis need. There was concern that if colleges do not respond fast enough to critical in-service training needs, state and local educational agencies may be forced to assume training responsibilities that would be better met if field service agencies collaborated with colleges to get the job done.

There was strong interest in and support for the kinds of training programs described in the "show and tell" sessions of the conference, particularly those in which colleges and local school districts entered into formal partnership to provide supervised field experiences that exemplified recommended service practices and training designed to improve the regular-special education interface. In these situations the trainee has opportunity to translate theory and methods learnings into effective practice with children under the direct, continuous monitoring of training staff whose own teaching behavior exemplifies the skills to be acquired. In many of the most successful instances, these personnel trainers are under joint appointment between the college and the schools. They are thus able to assist in improvement of practices within field training stations; this in turn yields more demonstration opportunity and more ideal practicum sites. The learning laboratory is the real world in these programs.

Cross-group discussions around the decategorization, desegregation, delabeling issue seemed to reveal a general consensus that the special education field will have to modify its historical practice of organizing instruction around categories of presumed defect and proceed with dispatch to find effective ways of individualizing instruction to eliminate most of the undesirable effects produced by past categorical, more segregated approaches. The Willenberg statement was accepted as a good summary of current thinking on the issues.

Most participants agreed that this issue is particularly critical with respect to education of the mildly and moderately handicapped who have for so long comprised the major proportion of the EMR, ED, and LD populations. Desegregation is seen as less of an issue with the very severely retarded. There is much agreement that significant changes must be made in regular educational practices to make "mainstreaming" effective for those children who are best educated in the mainstream setting. Though the right of educational opportunity for all was accepted as a

basic principle of service delivery, mainstreaming of all handicapped was not considered feasible or even desirable for many children under current operating conditions in most Great Cities school systems.

Reports of the discussions and recommendations of like-role groups were presented at a general session. The general substance of these reports may be summarized as follows:

*Great Cities Administrators Group* (Dr. Richard A. Johnson reporting)

This group reported a crisis of need among some Great Cities administrators to help them

(a) determine how resources can be allocated to better meet their responsibility to extend effective service to all children, and

(b) develop and maintain in-service activities that would support the new trends recommended, including continuing education for special and regular education administrators.

It was felt that Great Cities school administrations need help from the Special Education Leadership Training Institute, Bureau of Education for the Handicapped, or other potential sources to help them conceptualize and evaluate their practices in terms of what has been recommended as desirable at this conference.

This group recommended that regional planning sessions be held that would include interagency representatives. Opportunities for mutual support should be explored in these sessions. Consideration must be given as to how state laws and regulations constrain movement in directions desired and how such limitations to improvement in direct service can be removed. Directors indicated that although relaxation of funding regulations can often be secured to allow small, short-term "experimental" variations in practice, few states have taken as substantial or comprehensive steps as the Texas Education Agency to encourage education for all, desegregation, decategorization, delabeling, and in-service personnel training to fit new service practices. Nor have many colleges gone as far as some programs described at this conference in trying to meet the training concerns felt by state and local education agencies.

The LEA group suggested that financial support be sought for site visits of cross-agency representatives (from SEAs, Great Cities LEAs, and colleges) to observe promising programs in other cities, to follow people around for several days to see how the model works, how functionaries function, how available resources are exploited.

*State Education Agency Representatives* (Dr. William Ortman reporting)

This group saw need to develop a position statement on needs and

possibilities as perceived at the state agency level. They reported that a vehicle for this exists in a project for state directors that is already underway. However, there is need to identify what things should be included in such a position statement.

Participants in this group acknowledged their responsibility to adopt an action-oriented posture, to help point the way toward better practices through appropriate modification of regulatory practices and technical assistance from the SEA level. However, they solicited clearer specification of the state level constraints thought to be barring improvement of practices at the local level. There was suspicion that some of the factors said to be constraining movement forward do not exist in fact or could be relatively easily modified if LEAs formulated their needs, goals, and plans of action more precisely.

*Higher Education Representatives* (Dr. Bruce Balow reporting)

There was verbal acknowledgment of the responsibility of higher education training institutions to be responsible to field needs resulting from changing field service practices. The impression prevailed that colleges have not been as responsive as they should be to the training-related manpower needs of the Great Cities. The group did not seem optimistic about how easily the obstacles to better response could be removed. For instance:

(a) The system within which college professors must function does not reinforce, equally with other possible activities, staff investment in continuing education or high effectiveness as a trainer of practitioners. In many places promotion still comes more readily to those who do research and publish than it does to those who invest the substantial amounts of time and competence required to teach others how to be good teachers. Good practicum supervision in the field requires smaller class loads.

Legislators and college administrators still use numbers of students enrolled as a justification for adding or dropping positions. These college people acknowledged their responsibility to work on changing the reinforcement system but saw this responsibility as a hard nut to crack.

(b) They saw that problems could arise in preservice education if local districts are inclined to invest their resources in continuing education of their own staff members at the expense of providing preservice laboratory experience for nonemployees of their system. There is a problem in that college personnel are not always welcome in the schools; the school's obligation to professional training is not always accepted.

(c) They acknowledged the necessity to move more educational personnel training out into the field to give trainees a better reality base. At the same time, a case can be made for the value of the historical-theoretical knowledge which may be best presented on campus.

(d) Departmental jurisdictional disputes make it difficult for special education-regular education and other related professional training programs to impact on each other at the college level. This problem is deeply ingrained in institutional practices bearing directly on staff reward systems and is not likely to be easily modified. Even within single departments such as special education departments, intradepartmental programs that have historically been operationalized along categorical lines find it hard to shift to noncategorical or cross-categorical address. Staff members often have a personal career identification with and a life investment in one "type of child," which threatens to be eroded by more generic or noncategorical approaches. Severely limited resources are not readily reallocated as responsibility to meet the instructional needs of severely handicapped children is mandated at the same time that training of special education "generalists" is urged to support handicapped children in their mainstream participation.

There seemed to be less agreement in this group about what the next steps should be to move colleges forward on the kind of thinking presented at this conference. The historical nature of the college or university as a "community of scholars" free to pursue their own interests, out of which investment basic truths are expected to emerge, is sufficiently unlike the specified action purposes of a service delivery agency such as a public school system to make it difficult to marry agency resources in a systematic, programmatic push toward mutually agreeable ends. Nevertheless, participants acknowledged need to work on the problem, while still protecting the obligation of college personnel to feed the basic knowledge pool on which effective local in-service must depend.

*Urban-Rural Program Representatives* (William Gibbs reporting)

This group was not as directly involved with the substance of this conference as were the three previous groups. However, they saw considerable relevance of the issues discussed to their own responsibilities, and saw considerable possibilities for improvement of practices in their own programs in the "show and tell" sessions of this conference. They requested that some of these presentations be repeated so more of the members of their group could hear about these models. This was arranged for them.

*Trend Project Representatives* (Joe Rodriguez reporting)

This group, like the EPDA Rural-Urban program group, attended sessions of this conference as part of a conference of Trend project directors. They reported that they were impressed with the emphasis on needs assessment and education tailored to individual child needs determined by appropriate assessment procedures. They expressed strong support of the need to integrate action that this conference recommended. They seemed pleased at the special education directions being recommended.

*Presenters Group*

This group was asked to discuss dissemination problems. There was discussion of how dissemination could be enhanced. Emphasis was placed on publication and provision of technical assistance teams for programs wanting to improve their performance. Presenters felt that the discussions following their presentations indicated ability of listeners to identify their own problems but did not seem to indicate that they saw as much answer to their problems in the models the presenters were describing as the presenters thought was there. They wondered why the relevance was not more apparent. Was it inadequacy in their presentation methods? Was there a sufficient difference in the way funding of a "project" and funding of a ongoing service system occurs so translation to broader practice is too difficult? If the latter, should block grants to Great Cities programs for handicapped children, with minimal strings attached, be encouraged to enable the kind of freer operating conditions available to a special project?

In the general discussion following small group discussions comments were made that were relevant to action follow-up to this conference. Ortman noted that SEA movement to a program approval basis for granting of funds (e.g. ESEA Title VI and new practices described by SEA representatives from Minnesota and Texas) provides a precedent for block funding. R. Johnson pointed out that switching to block funding to enable the kinds of modifications in practice recommended here would require technical assistance to Great Cities administrators responsible for leading the action. Ray Simches pinpointed three outstanding problem areas in institutional adoption of new practices:

1. The *confusion* that attends transplanting to new settings the findings of existing programs which have proved successful in their own particular settings. The Great Cities have the longest standing special education programs because, in the main, public school special

education programs started first in the cities. Substantial categorical programs exist that must be replaced or significantly modified before the new model can take hold. School systems lack funds to support the planning, staff development, facilities remodeling, etc., which installation of new practices usually requires. "School must keep" while transition takes place since attendance and service are both mandatory.

2. There must be firm, dependable *advocacy* for the change, full commitment to it at the district superintendent level.

3. There must be a feeling of *ownership* on the part of those who must implement the new practices. They do not feel real ownership until and unless they have been involved in planning and developing the idea. Though presenters may feel frustrated at the moment because listeners do not seem to enthusiastically embrace the road map the presenters have developed out of their years of mistakes and successes, they should take heart. Time may reveal that ideas they presented were being "tried on for size" by the listener and may yet be useful guides in developing field practice in other settings.

**Discussion Summary**

There seemed to be consensus that the parties who have governance authority must plan and work together if improved, integrated service is to be the end result. The best way to promote this discussion may be through regional and state planning meetings. Development of different ways of allocating funds and evaluating outcomes is essential in all aspects. There also seemed to be consensus of need for significant modifications in funding practices which go beyond just more financial support. Development funds are needed by agencies to enable the transition from conventional practices to new ways of serving.

# LABELING AND MINORITY GROUPS —AN ISSUE

PHILIP H. MANN
*Director, Special Education*
*Developmental and Technical Assistance Center*
*University of Miami*
*and*
JEFFREY L. BREZNER
*Assistant Director, Special Education*
*Developmental and Technical Assistance Center*
*University of Miami*

In 1954 the United States Supreme Court in the case of *Brown* v. *Board of Education of Topeka, Kansas*[1] found that in the field of public education the doctrine "separate but equal" was unconstitutional and deprived the separated group of the equal protection of the laws guaranteed by the Fourteenth Amendment. This decision was based upon the premise that a system in which students are separated by race tends to have a detrimental effect upon the black children wherein a sense of inferiority is denoted by the separation affecting the motivation of the students to learn. Such segregation, it was felt, retards the educational and mental development of black children and deprives them of some of the benefits they would receive in a racially integrated school system. *Brown* initiated an end to the dual system of education for black and white children in the United States.

Since 1954 the country has progressed in the desegregation of its schools, particularly in the South, to the extent that the pupil population and the staff of the school includes members of all ethnic groups served by their school district. In court decisions since 1968 educators have been charged with an affirmative duty to end desegregation and to do so prior to litigation efforts, in effect to end it "now." While response to this charge by the courts has been varied and in some cases defiant of specific court orders, the overall effect of the desegregation decisions of *Green*,[2] *Alexander*,[3] *Swann*,[4] and now *Keyes*[5] has been to provide a catalyst for change in the educational process. The doors were opened for new ways to focus on human values, attitudes, and resources within the schools based upon the changing composition of the student population. As the schools move toward desegregation, the heterogeneous mix-

ture of pupils in the schools presents administrators, teachers, school board members, curriculum experts, and others with an opportunity to examine current educational policies and practices in order to determine how well they meet the needs of the pupils served by the schools.

It has been recognized that merely attaining a multiracial composition within a school is not sufficient to eliminate racial isolation. A mix within each classroom is necessary to eliminate the deleterious effects of racial isolation. Movement along the continuum from segregation to desegregation to integration can only become reality when students of all racial, cultural, and social class backgrounds are free to learn in an atmosphere devoid of invidious group distinctions and barriers. Integration as distinct from mere physical desegregation aims at achieving equality of access to the opportunities and benefits of society, both immediately and in the long run.

School segregation within schools has occurred in many ways, from blatant violation of the spirit of desegregation orders creating all-black classrooms within nominally desegregated schools to that which is produced by the administrative device of "tracking" and homogeneous "ability" grouping. Although no evidence proves that tracking improves either the quality of instruction or achievement, there is compelling evidence that the creation of racially identifiable classrooms has grave negative consequences.[6]

Despite the fact that there is little research to support ability grouping in terms of minority group children, the belief still persists that separating students into discrete categories based on "achievement scores" results in better education. There is, however, a basic philosophical question that still needs to be answered. The question is: just what exactly is the purpose of school?

School has been defined as "preparation for life." Life in the real world primarily involves human interaction and the understanding of interpersonal relationships. The question is: how far does the school go in fostering such "humanism"? Since humanism is not as easily measured as social studies or arithmetic, it tends not to become explicit in terms of school curriculum or structure; instead by ability grouping or tracking or labeling we tend by the nature of the process to prepare students to become part of the outgroup. The problem learner often develops ways to circumvent the system instead of seeking opportunities to improve the system and become a part of it.

In the court case of *Hobson* v. *Hansen*,[7] Judge J. Skelley Wright dealt with this whole problem of the track system. He recognized that the sum result of the system was such as to deprive the poor and a majority of the

Negro students in the District of Columbia of their constitutional right to equal educational opportunities. Ability grouping is by definition a classification intended to discriminate among students, the basis of that discrimination being a student's capacity to learn. The complaint in this case was that the practice as administered in the District of Columbia public schools had become a system of discrimination founded on socio-economic and racial status rather than on ability. In addition to the inability of students to be removed from this system (for over 90% of the students, the assignments were permanent), there was a distinct lack of adequate remedial and compensatory education programs for students left in the lower tracks because of cultural handicaps.

The evidence in this case showed that the method by which track assignments were made depended essentially on standardized aptitude tests, standardized to white-middle classed norms that were inappropriate for use with a large segment of the student body, producing inaccurate and misleading tests scores when given to lower class and Negro students. Accordingly, the track system amounted to an unlawful discrimination against those students whose educational opportunities were being limited on the erroneous assumption that they were capable of accepting no more. As such, the track system was simply abolished because it discriminated against the disadvantaged child, particularly the Negro. This ruling has since been reinforced by additional litigation as was stressed by Paul Dimond, a staff attorney at the Harvard Center for Law and Education, when he wrote:

> Wherever classification has the effect of systematically and disproportionately singling out a minority group of a particular race or national origin for exclusion, placement in special education class or the bottom tracks, it may be a "suspect classification," or a violation of Title VI of the 1964 Civil Rights Act. . . . Moreover, if substantially racially disproportionate school assignments are prohibited by state regulation . . . the resulting racial classifications are simply unlawful.[8]

It can be seen that where students are placed in special education classes by means which result in "black" special education classes, that not only can the educational process be suspect, but there in fact may exist an illegal situation. In working in the area of desegregation, one is often confronted with the situation of a "desegregated" school in which most, if not all of its special education students are black. Educationally speaking, assignment to special education tracks often places a stigma of inferiority on the child (similar to that condition created by the dual

school system declared unconstitutional in *Brown*) and results in a lower chance of receiving a high school diploma which has a high value in our culture. Many white parents often avoid sending their children into special education programs when it appears that black children predominate in those classes because of the stigma of inferiority that has been created.

In *Stewart* v. *Phillips*[9] in Massachusetts allegations of racial discrimination based on disproportionate assignments of black children, language difficulties, test bias, inadequacy of evaluation and school testers, and other procedural rights were made. A federal judge contended that such assignments constituted stigmatization of the child by public authority which under previous rulings had required a prior hearing. Consequently, new statewide regulations for placement of allegedly retarded children were adopted calling for a full prior evaluation, the elimination of the use of labels insofar as possible, integration into regular classrooms insofar as possible, and an appropriate publicly supported program of education for all children.

In *Larry P.* v. *Riles*[10] it was ruled that black students may no longer be placed in California classes for the "educable mentally retarded" on the basis of I.Q. tests that lead to racial imbalance in the composition of those classes. Regarding this court case, it is important to note the role that was played by an educator in bringing about the above decision as well as other sweeping changes in the special education programs in California.

Sociologist Jane R. Mercer for several years has studied how schools, medical agencies, and community organizations label persons mentally retarded. Dr. Mercer, presently the director of a federally funded research program (Program Research in Integrated Multi-Ethnic Education) at the University of California at Riverside, has directed a study of mental retardation in Riverside for the past ten years, recently linking it with studies of school desegregation and integration. She now heads up a project to standardize the individual I.Q. test used in the San Francisco Unified School District on urban black and Spanish-surname students. An examination of the schools in California revealed four and a half times more retarded Chicano children and two times more black children than chance would have dictated, but only half as many Anglo children. This is a nationwide problem involving Puerto Ricans in New York, Chicanos in the West, and blacks nearly everywhere. Dr. Mercer looked at the definition of mental retardation as defined by the American Association on Mental Deficiency (AAMD), which said that mental retardation was "subaverage general intellectual functioning . . . associated with impairment in adaptive behavior," and she found that few, if any agen-

cies had measurements of adaptive behavior, a prerequisite for labeling mentally retarded children as defined by AAMD. Another observation confirmed by statistics was that I.Q. tests are culture-specific and therefore biased. In the study when they controlled for social backgrounds of the children, there were no differences in the average intelligence between the Anglos and the blacks, or between the Anglos and the Chicanos. Dr. Mercer proposes a more humane diagnostic program, a system of a pluralistic assessment that would be appropriate for integrated multiethnic schools. This system includes a measure of the child's adaptive behavior and role performances in nonacademic settings (Adaptive Behavior Inventory for Children) and a measure of the child's health history and impairments (Health History and Impairment Inventory). The socialization milieu of the child is to be measured (Socio-Cultural Modality Index), and this information is used to develop a multiple framework for interpreting the measuring of a particular set of scores. Finally, individual cognitive skills would be measured. This system serves to differentiate between prognosis (of which the I.Q. is capable) and diagnosis (which has been ignored to a large extent after the prognosis has been made).

What is important about PRIME and Jane Mercer is the impact they have had upon the state of California through the courts (as in *Larry P.* v. *Riles*); the legislature where various measures have been passed to equalize the opportunity of black, brown, and Anglo children within that school system, and in the schools where regular teachers now are being confronted with students of different ethnic groups now being put back into the regular classrooms in the quest to seek true quality integrated education.

Dr. Mercer is quite concerned with the effect her research has had since she is afraid that she may have done those disadvantaged children a great disservice. She is a great believer in preparing for change as well as identifying change strategies. In this particular case Dr. Mercer fears that teachers of regular classrooms are unprepared to handle the influx of special education children back into the mainstream of public education especially in terms of the teacher's abilities to go beyond prognosis and actually diagnose for the individual needs of the pupils involved. It would seem that if the programs described in this monograph were to reach the public schools, many of her fears would be dispelled, and the process would be initiated so that the progress from desegregation to integration would be such that the schools could provide culturally and structurally integrated learning environments for students of all racial and cultural backgrounds and special education would not become the method by which segregation is maintained within the schools.

If the goals of multiracialism, integration, and cultural pluralism are to be fullfilled in the public schools, it must be insured that minority group people have an equal opportunity to acquire skills that will enable them to compete successfully with members of the dominant group and foster attitudes that lead to positive interactions between members of both groups.

In instances where special education students have been denied education in the public schools, more and more cases are reaching the courts, the most prominent of which was *Pennsylvania Association for Retarded Children* v. *Commonwealth of Pennsylvania,*[11] which brought suit on behalf of the retarded in Pennsylvania. In sum, this action declared that all children are entitled to the full benefit of a quality education. As a result many seriously handicapped children have been enrolled and programmed in the public schools. In *Mills* v. *Board of Education of the District of Columbia,*[12] the Court of Appeals declared that: "The District of Columbia shall provide to each child of school age a free and suitable publicly supported education regardless of the degree of the child's mental, physical or emotional disability or impairment." Education as we envision it today will not continue to exist unless it becomes responsive to the present critical needs of a changing society.

The major legal decisions discussed that have come about over the past decade are beginning to alter perceptively in many arenas of the country some of the cherished beliefs which are still the basis of our educational system the belief, for example, in the almost infallible nature of tests as a means of grouping children, labeling children, and as predictors of behavior. All too often they become self-fulfilling prophecies since unfortunately expectation is something we talk about but in reality have little control over where teacher and child are concerned. Another entrenched belief is that without a label we will not know what to do with the child. The problem is that we have too many labels for the same things but not enough answers. Perhaps we are not asking the right questions. This is especially true of the classroom teacher, who has been conditioned in many cases to take the easy way out. If I cannot teach him, then we can label him and get him into a special education class; then we will not have to worry about him and perhaps our collective conscience will be assuaged.

Teacher education is faced with the problem of serving children in diverse educational settings. The concept of accountability is predicated upon the fact that teacher trainers at all levels will acquire the special skills necessary to prepare teachers to teach in these diverse settings. The need exists to accelerate the modernization of teacher training at the

university level and to communicate such changes to regular educators on the job through inservice training permeating every aspect of staff development programs.

For education to become a viable response to the needs of society, the personnel involved in the extension programs and those participating in the needs assessment of local areas must have the expertise to develop comprehensive educational programs and to upgrade the skills of the regular classroom teacher. Training programs must be child centered, humanistic, individualized, and task oriented. Teachers must become skilled at needs assessment and in the application of the methodology necessary to select, develop, and evaluate sequential educational curricula. Training should give the regular classroom teacher, who is often "material bound," the knowledge and skills to implement individualized instructional programs for all children. The regular teachers must learn to evaluate children's educational needs not only in terms of the classroom setting but in terms of the cultural, geographic, and socioeconomic composition of the community as well.

The fulfillment of these objectives cannot be accomplished in segregated schools or in solely segregated classrooms, but can be facilitated in integrated schools by educators working at change in school policies and practices.

## Notes

1. *Brown* v. *Board of Education of Topeka, Kansas.* 74 S. Ct. 688 (1954)
2. *Green* v. *County School Board.* 391 U.S. 430 (1968)
3. *Alexander* v. *Holmes County Board of Education.* 396 U.S. 19 (1969)
4. *Swann* v. *Charlotte-Mecklinberg Board of Education.* 402 U.S. 1 (1971)
5. *Keyes et al.* v. *School District No. 1 Denver.* 93 S. Ct. 2686 (1973)
6. James McPartland, "The Relative Influence of School Desegregation and of Classroom Desegregation on the Academic Achievement of Ninth Grace Negro Children," *Interim Repal* (September, 1967).
7. *Hobson* v. *Hansen.* 269 F. Supp. 401
8. Paul R. Dimond, "The Law of School Classification," *Inequality in Education.* Number 12 pp. 30-39.
9. *Stewart* v. *Phillips.* C.A. 70-1199-F (D. Mass.)
10. *Larry* v. *Riles.* 343 F. Supp. 1306 (1972)
11. *Pennsylvania Association for Retarded Children* v. *Commonwealth of Pennsylvania.* 334 F. Supp. 1257 (1971).
12. *Mills* v. *Board of Education of the District of Columbia.* C.A. No. 1939-71.

SECTION II

# STATE AND LOCAL EDUCATIONAL AGENCY PROJECTS AND COOPERATIVE PROGRAMS

*Section II is an overview of projects essentially involving state and local education agencies and their cooperative activities with local universities. Varied examples are presented to provide the reader with a selection of alternative methods for providing special education services in different settings.*

The Maryland "Design for a Continuum of Special Education Services and Training Models" offers the state an organizational schema for serving increased numbers of children with handicapping conditions. The entire concept of the Continuum is based on: (1) providing more adequate services to a greater number of handicapped children; (2) increasing the number of children maintained in the mainstream of education; (3) decreasing the number of children relegated to self-contained classes; and (4) preventing serious learning problems through early identification and remediation. Implementation of a master phase of the Continuum, the training of regular classroom teachers, ancillary personnel, and parents, has been accomplished by a two-year EPDA pilot project. The project has focused on increasing the competencies of teachers, ancillary personnel, and parents in working with handicapped children. Expansion of specific training aspects of the Continuum and EPDA project will be effected through an instructional television (ITV) project which will offer introductory preparation to regular classroom teachers and special educators in the observation, identification, and management of children (K-3) with mild to moderate learning problems.

The Portland Public School "Prescriptive Education Program" EPDA Project, 1969-1972 describes the third year of a three-year project, with particular emphasis on the program's rationale and methodology for developing close working relationships between community and school personnel. The background of the program is discussed, as well as some of its effect on the involved schools and on the school district.

During the period under consideration, program personnel worked with a group of parents and teachers in a two-week summer workshop and subsequent sessions during the school year. This program led to the development of ongoing joint efforts to improve instruction and to dis-

continue segregation of children (according to age, achievement, or degree or type of "exceptionality") and has contributed to the school district's growing interest in participation by parents in the planning of school programs.

"East Cleveland Programs for Urban Educational Redevelopment Through Self Direction." A psycholigist once described East Cleveland as a special education system where the "normal child should be referred for special classes." In the four years that have passed since that statement was made, over 70% of the system's educators have been involved in *teacher retraining* conducted in the school district under the auspices of four universities. New programs from preschool to grade 12 have markedly changed the pattern of learning of its pupils.

Pupil adjustment, motivation, and achievement attest to the potential of the East Cleveland educational model. The principles upon which this model evolved are presented along with discussion relating to the problems involved with planning, implementation, and cooperation between a school system and university.

"Implementation of the Houston Plan—Retraining Regular Classroom Teachers to Work with Handicapped Children within the Regular Classroom Setting." A core of master teachers are being trained in three demonstration training centers. These Teacher Development Centers (TDC) are in the process of developing operational designs that will demonstrate the efficacy of programming for the handicapped in the regular program through the individualization of the instructional process and the utilization of TDC's differentiated staffing concepts for special education support personnel.

Regular classroom teachers, special education teachers, parents, and leadership personnel are presented with the human, technical, and conceptual skills and strategies necessary for integrating and maintaining handicapped children in the regular classroom. The acquisition of these teaching skills and strategies will be facilitated by the opportunities to observe classroom models, rehearse teaching skills during simulation exercises, and receive immediate feedback concerning approximations to training objectives afforded by the TDC's modular curriculum.

During the next four years, teams from each of the 170 elementary and 70 secondary schools in the Houston Independent School District will rotate through the training center for two, five working-day intervals. By the end of the 1972-73 academic year, six regular classroom teachers in 85 schools and 305 special education teachers will be providing their school faculties with the instructional models necessary for the success of the handicapped child in the mainstream of Houston's education programs.

Community involvement and organization will be guaranteed by establishing sensitive channels of input for individual parents, community agencies, and active parental associations.

The Harrison-University Cooperative Resource Center was established as a joint effort of the University of Minnesota Department of Special Education and the Minneapolis Public Schools. The Center is located in a Minneapolis elementary school and serves two major purposes. The first purpose is the development of an effective model for the delivery of special education services to EMR children who are placed in regular classes. The Harrison Center serves as the prototype resource model for elementary schools throughout the city.

With the occurrence of such changes in service delivery for EMR children within local school programs, concomitant changes in teacher training are necessary. The Harrison Center also serves as a university practicum station for prospective special education teachers. The student teaching experience is based on the prescriptive teaching model and includes techniques for diagnosis, evaluation, consultation, and remedial instruction.

"The University of Wisconsin-Madison Public Schools training, service, and program development project for severely handicapped children." Perhaps the two most salient characteristics of this teacher preparation program concerned with handicapped students are the intensive and reciprocal involvement with the Madison Public Schools and other local agencies offering services to handicapped students and the empirical (i.e., direct measurement and behavioristic task analysis) orientation of the university trainers involved.

This presentation is divided into three parts:

(1) Structure, assumptions, and practical operations of a teacher training model for severely handicapped students currently in operation at the University of Wisconsin-Madison Public Schools.

(2) Information pertaining to the role of public schools in pre- and in-service training, public school-university relationships, and the necessities for and practicalities of approximating the development of competency based instructional programs.

(3) Examples of instructional programs that have been effectively implemented in a public school program for severely handicapped sutdents.

A MODEL: The Development Centers for Handicapped Minors in The California Public Schools. If we accept the right to an education of

every child or the zero rejection philosophy for special education, as has been specified in the recent landmark court decision, the Development Center for Handicapped Minors will become an important part in the continuum of special education services in the state.

# THE MARYLAND DESIGN FOR A CONTINUUM OF SPECIAL EDUCATION SERVICES

STANLEY I. MOPSIK
*Coordinator, Office of Special Education*
*Maryland State Department of Education*
*and*
LUCY ANNE HESSION
*Director, Special Education ITV Project*
*Maryland State Department of Education*

The Maryland State Department of Education has designed an organizational pattern through its *Design for a Continuum of Special Education Services* (Continuum) for serving increased numbers of children with handicapping conditions. The entire concept of the Continuum is based on: (1) providing more adequate services to a greater number of handicapped children; (2) increasing the number of children maintained in the mainstream of education; (3) decreasing the number of children relegated to self-contained classes; and (4) preventing serious learning problems through early identification and remediation.

Implementation of the Continuum concept has occurred through a two-year pilot study and training models which have formed the Continuum's major components. These training programs, described in later sections, are:

Education Professions Development Act (EPDA), "The Training of Regular Educators, Parents and Ancillary Personnel to Work with Handicapped Children"; Maryland Training and Development Center; and Special Education Instructional Television Project, "Teaching Children with Special Needs."

## The Continuum—A Pilot Study

The Continuum design consists of seven programs of educational services, five of which are in the public school framework, one in nonpublic special day classes and home-hospital teaching programs, and one in residential settings. All programs focus on the child's learning strengths rather than weaknesses, and throughout emphasis is placed on prevention of learning handicaps.

Under the Continuum, the exceptional child can receive whatever specialized service he needs while retaining affiliation with the regular classroom, except for those whose learning problems are so severe that

they cannot benefit from regular classroom instruction and, therefore, need the services designed for the self-contained classroom or nonpublic school placement. The Continuum not only provides a more flexible organization to meet varying needs, but also allows for movement along the continuum. For example, as the program identifies as well as remediates a child's learning difficulties, he can move along the continuum to a program providing less supportive services and more identification with children in the regular school classes. Not only is this plan beneficial to the child, but it reduces the financial cost of his education.

To implement this plan, a two-year pilot study was undertaken in 1970 which introduced the Continuum in four local education agencies (LEAs) in the state. Four experimental and four control schools were selected in the LEAs that represented the demographic spectrum of urban, suburban, fast growing, and rural found in the Maryland public school population.

The programs of services initiated in the pilot study and retained under the Continuum's expansion are described below:

*Program I*
*Consultant Services*

Prevention, early identification, and intervention of actual or potential problems that may interfere with learning and adjustment are the primary objectives of this program. Psychologists, pupil personnel workers, nurses, and guidance counselors provide consultative services to parents, teachers, and pupils before the problem becomes a major handicap.

*Program II*
*Diagnostic Prescriptive Services*

Children exhibiting a learning problem are referred to the diagnostic prescriptive teacher for an educational assessment. An educational prescription is developed based on the child's learning profile and appropriate placement is determined in cooperation with other professionals. The diagnostic prescriptive teacher interprets the learning profile, suggests methodology, prepares and demonstrates materials to be used in the remedial process, and provides continuous follow-up and supportive services.

*Program III*
*Itinerant Services*

Included in this program are group and individual services provided to children by itinerant specialists. While they remain in the regular classroom to receive the bulk of their education with the rest of their peers, those children with visual handicaps, speech, hearing, or language impair-

ments may receive services such as special instruction, therapy, and counseling. The itinerant specialist serves as a consultant to the teachers in other Continuum programs and demonstrates appropriate materials and techniques used in working with children having vision, speech, hearing, or language handicaps.

*Program IV*
*Cooperative Services*

The child assigned to a resource room spends part of the school day in the resource room receiving special tutorial assistance and the remainder of the day in the regular classroom. He remains on this schedule until the problem is minimized and he is returned full-time to the regular classroom. If progress is not evident, the child is referred back to the diagnostic prescriptive teaching program (Program II) for reevaluation.

*Program V*
*Special Class Services*

Special Education classes in the public schools.

*Program VI*
*Nonpublic Special Day Classes*

Nonpublic special day classes and home-hospital teaching programs.

*Program VII*
*Residential Services*

The three Continuum programs V through VII provide for educational programs and services for severely handicapped children who require major modifications in curriculum which cannot be accommodated for even a portion of the day in the regular classroom.

*Funding*

Reimbursement per school depends upon the number of pupils receiving services under the Continuum. The funding formula is as follows:

| | *Minimum and Maximum Number of Children to be Served* | *Dollar Allocation* | *Possible Total Reimbursement* |
|---|---|---|---|
| Program I | 40-80 | $ 150 | $ 6,000 |
| Program II | 40-80 | 370 | 15,000 |
| Program III | 20-30 | 150 | 3,000 |
| Program IV | 20-30 | 740 | 15,000 |
| Program V | 10 | 1,000 | 10,000 |
| | | Total Possible Reimbursement | $59,000 |

*Training*

Training for the sixteen teachers added to Continuum experimental schools under Programs II and IV has been through extended several-phase workshops emphasizing diagnostic prescriptive teaching.

The Continuum pilot program has represented the addition of two special education teachers and two instructive aides to a school's K-3 teaching staff. One teacher works with children individually to diagnose their learning problems while the other works with small groups of children who spend the rest of their day in the regular classroom.

*Pilot Study Results*

Results of the pilot study in the four experimental schools in four LEAs has shown: (1) Overall acceptance of the Continuum program by school personnel; (2) The delivery of more services to Continuum pupils than to their control school counterparts; (3) Services provided to twice as many pupils in experimental as in control schools; (4) Significant differences in achievement in only one of the four experimental schools.

*Continuum Expansion - 1972*

The Continuum program in 1972 has been expanded to include 22 schools in nine LEAs with 44% of the K-3 population now receiving services. The Continuum personnel trained totals 208.

**Education Professions Development Act Project**

Implementing an innovative program such as the Continuum in the public schools requires the understanding and cooperation of the parents, teachers, administrators, and ancillary personnel. A special project funded under EPDA, "The Training of Regular Educators, Parents and Ancillary Personnel to Work with Handicapped Children," is aimed at providing these persons with the additional training necessary to function within this pilot program.

The EPDA project has three populations for which training is being provided. These include: regular classroom teachers, ancillary personnel, and parents. Although each population is an independent entity, all participants are concerned with providing a maximum amount of assistance to the children exhibiting learning problems in the classroom.

Objectives for regular classroom teachers (K-4) are designed to help them:

(a) Become familiar with services provided within the Continuum Design.

(b) Develop positive attitudes toward handicapped children so that a child with a mild to moderate condition may be maintained in the regular class.

(c) Perceive their role and the role of other staff members in the identification and remediation of children with learning problems.

(d) Enable the teacher to observe and identify children with potential learning problems.

(e) Request supportive services when the problem cannot be met in the regular classroom with existing programs.

(f) Work cooperatively with supportive and ancillary personnel in developing and utilizing various remedial programs and teaching strategies in the regular classrooms.

In conjunction with the Continuum, the EPDA project will also attempt to measure the growth in reading achievement and personal-social adjustments as the regular personnel receive training and the diagnostic/prescriptive and resource personnel provide assistance to the children.

Objectives for parents are designed to help them through training to:

(a) Develop positive attitudes toward their children with learning disabilities.

(b) Create a positive atmosphere in the home.

(c) Develop an understanding of learning disabilities.

(d) Develop an awareness of the Continuum design.

(e) Develop a willingness to participate and assist in the program for their children.

Objectives for ancillary personnel are designed to help them through training to:

(a) Become familiar with and participate in the services provided in the Continuum design.

(b) Perceive and assume the role assigned to their respective job descriptions.

*Training of Regular Educators and Ancillary Personnel*

The in-service training for regular classroom teachers and ancillary personnel is conducted in two phases. The formal coursework consists of two workshop-type courses. Ongoing training is provided through in-service meetings conducted at each school during the year.

The two three-credit courses have been contracted to George Washington University and are conducted by the staff of the George Washington Special Education Department. The courses have been designed to reach the objectives stated above and the courses have been adapted to reach

the population included in this project. Topic areas covered during this course work are: peer-group dynamics, family dynamics, child-management techniques, the educational implication of aggression both active and passive, therapeutic milieu in public school classrooms, life-space interviewing for classroom teachers, behavior modification theory and techniques, attitude therapy, learning theory, and the need for a change in the role and function of public schools.

Since these are workshop-type courses, considerable participation is required by the teachers. The methods and techniques used in these courses include: lecture, open discussion, demonstration teaching, analysis of specific case studies, simulation role playing, and analysis of videotapes of participants' performance in their regular classrooms.

The in-service training is done in each of the four pilot schools and deals with the problems and needs of that particular school. These meetings are held with the cooperation and attendance of the principal and involve other staff members in addition to the EPDA participants. The meetings are designed to supplement the coursework. A meeting may consist of an open discussion regarding the problems of implementation of the Continuum concept, referral processes, administrative procedures, specific content material, use of instructional materials, organizing for effective classroom teaching, or the difficulty of putting classroom theory into practice. Consultants or area specialists are called in when requested.

One underlying objective of this project is to develop within each school a nucleus of trained personnel who will provide the leadership to determine training needs, arrange and conduct in-service meetings, outline procedures for staff meetings, and conduct "in house" evaluation. This procedure would require the assignment of responsibility for program development, implementation, and ongoing evaluation with those personnel directly involved: e.g., regular teachers, diagnostic/prescriptive teachers, resource teachers, ancillary personnel, special education teachers, parents, and administrators within the school. This method of operation would provide each school with a competent, trained group of personnel from which to draw upon as resource staff each year, thus creating a multiplier effect.

*Training of Parents*

The parent-training phase of the project consists of two parts. The parents are invited to participate in meetings to discuss the educational services provided for children with learning problems, their contributions, the effect of the home on the education of their children, and the

varieties of problems that may affect learning. Whenever possible, consultants are used to work with parents on subjects ranging from the utilization of behavior modification in the home to the training in development of perceptual-motor skills.

Parents are invited to visit the school to meet with the ancillary personnel who are providing services for their children. They have the opportunity to view their child in his classroom or resource room, talk with each of these teachers, and have the child's educational program explained by the diagnostic/prescriptive teacher. These visits serve to provide the parent with (1) a better understanding of their child's learning problem, (2) a knowledge of the services available in the school, and (3) material for discussion at the parent meetings.

These trained parents will act as "ambassadors" to enlist the support of the community and aid in disseminating information, in providing guidelines for the project, and in helping to develop policies based on the needs of the community.

*Evaluation*

Appropriate evaluative techniques are being utilized to determine the feasibility of implementing these programs throughout the state of Maryland.

### Maryland Training and Development Center

Supportive services are a necessary adjunct to initiating and maintaining Continuum programs in schools. The Maryland Training and Development Center (MTDC) was established in 1970 to provide instructional materials support and the utilization of pedamediists to all Continuum schools. "Pedamediists," educators knowledgeable in pedagogy and the use of media, are assigned to participating schools to provide expertise in diagnostic teaching and resource room activities.

In 1972 MTDC has expanded its role to serve as the developer and implementor of the Continuum program in all schools. In addition MTDC has assumed responsibility for the overall administration of the EPDA project.

### Special Education Instructional Television Project

The determining factor in the type and kind of educational services available to children with handicapping conditions in the regular classroom, to a great extent, is the number of personnel available to provide

these services. In order to reach greater numbers of regular educators, MSDE has developed an instructional television (ITV) project, "Teaching Children with Special Needs" (Special Needs).

"Special Needs," developed in 1970-71 by MSDE's Division of Instruction, has been produced for open circuit telecast over the state's public broadcasting network by the Division of Instructional Television. The project has been funded under a special project grant from the Bureau of Education for the Handicapped, U.S. Office of Education.

The "Special Needs" project has been designed as a viable training model to offer educators introductory preparation in the observation, identification, and management of children (K-3) who exhibit mild to moderate learning handicaps.

As an adjunct to the Continuum and the EPDA Project, "Special Needs" will extend the concept of providing children with handicapping conditions quality educational services within the mainstream of regular education to increased numbers of educators within the state. The ITV project seeks to:

Assist regular and special educators in developing observational skills that will enable them to recognize learning patterns which may indicate actual or potential problems for pupils;

Encourage educators to focus on learning characteristics rather than etiological categories of pupils; and

Offer teachers basic information on a variety of techniques, methods, and procedures that can be utilized in working in the regular classroom with pupils who have learning problems.

This instructional television training project consists of four major components in order to provide essential instructional information and training to educators. These are:

1. *Leadership Corps*

A leadership corps of selected special and regular educators has been prepared by project consultants to serve as instructors to teacher participants of the ITV series.

2. *Instructional Television Series - A Telecourse*

Major elements of introductory information and training for teacher participants have been incorporated into sixteen ITV telelessons. The series' telelessons have been refined on the basis of general information requested about learning problems by a sampling of primary grade teachers in Maryland.

"Special Needs" has been developed as a telecourse which consists of: sixteen one half-hour instructional telelessons, an accompanying teacher's manual, follow-up seminars and related course work. Each telelesson will be telecast several times each week. Follow-up seminars will be scheduled weekly. During these sessions, information presented within the telelesson will be augmented and supplemented.

3. *Teacher Manuals*

Manuals, developed by project consultants in conjunction with the content of each lesson, are furnished teacher participants at the outset of the telecourse. The manual includes supplementary resource information such as pertinent background material for each content area, suggested educational strategies and techniques, instructional materials, prescribed readings and bibliographic references.

4. *Follow-up Seminars*

To provide the required substantive information for all telelessons and in all content areas of the series, follow-up seminars are conducted for teacher participants weekly by trained leadership personnel.

Seminars are scheduled at the most appropriate locations for participants. Those participating in the series for in-service may receive follow-up course work within their own schools; those participating for academic credit may attend seminars at the institution granting credit.

*Credit*

Participants enrolled in the telecourse will be eligible for Maryland State Department of Education in-service credit or academic credit from participating colleges and universities.

*Pilot Population*

The first telecourse has been offered to approximately 175 teacher participants (out of 11,000 potential teacher participants in the state).

*Content Areas of Telelessons*

Content areas dealt with briefly are: teacher attitude, observation of behavior, learning styles, behavior problems, oral language, reading, mathematics, and referral services. General descriptions of the sixteen telelessons appear below:

*Lesson 1*

*Preview*

Previews the series and clearly specifies the problems to be treated in the series.

*Lesson 2*
*Teacher Attitude I*

Explores possible teacher biases toward children and briefly examines those behaviors of children which are acceptable or which can be modified in order to aid learning.

*Lesson 3*
*Teacher Attitude II*

Examines briefly some ways in which teacher behavior positively or negatively affects a child's classroom performance. Selected procedures for analyzing teacher-child interaction are introduced.

*Lesson 4*
*Observation of Behavior*

Focuses on the use of critical observation in determining children's behavior patterns which interfere with learning and in formulating management strategies.

*Lesson 5*
*Learning Styles*

Focuses on children's use of the sensory modalities in learning as well as assessment and educational programming for learning strengths and weaknesses.

*Lesson 6*
*Behavior Problems I*

Examines briefly four kinds of classroom behavior for which short-term management techniques may be useful.

*Lesson 7*
*Behavior Problems II*

Focuses briefly on some long-term management techniques which may be useful for several kinds of classroom behavior.

*Lesson 8*
*Oral Receptive Language*

Examines certain expressive language problems of children, methods of assessing and working with these problems.

*Lesson 9*
*Oral Expressive Language*

Examines certain expressive language problems of children, methods of assessing and working with these problems.

*Lesson 10*
*Informal Assessment of Reading Problems*

Focuses on those components of the reading process that are problem areas for many children and offers some techniques for assessing these problems.

*Lesson 11*
*An Analytic Approach to Reading*

Examines briefly some of the analytic approaches to reading and focuses on language experience as one approach which can aid children with certain kinds of reading problems.

*Lesson 12*
*A Synthetic Approach to Reading*

Focuses on the synthetic approach to reading as one which can aid children with certain kinds of reading problems.

*Lesson 13*
*Mathematical Problems*

Focuses on specific fundamental difficulties children may experience in learning mathematics and some corrective techniques to be used.

*Lesson 14*
*Mathematical Problems*

Focuses on specific fundamental difficulties children may experience in learning mathematics and some corrective techniques to be used.

*Lesson 15*
*The Referral Process*

Focuses on the services, resources available, and the referral process.

*Lesson 16*
*Review*

Reviews concepts presented within six major content areas of the series and examines the interrelatedness of content in working with children with special needs.

The following materials dealing with the Continuum and its training projects can be obtained from the Maryland State Department of Education:

Audiovisual Materials and Publications:

*A Design for a Continuum of Special Education Services–Interim Report*

*Teaching Children with Special Needs*

Sixteen 30 min. color, sound, videotaped telelessons, television for-

mat, EIAJ No. 1, color standard, 1/2 inch. (Selected telelessons available on loan.)

Teacher Manual:

*Teaching Children with Special Needs*

Single copies.

Brochures:

"Education Professions Development Act"

"Maryland Training and Instructional Materials Center"

"Prescription for Special Education"

# PORTLAND PUBLIC SCHOOLS' PRESCRIPTIVE EDUCATION PROGRAM

HERMAN M. FRANKEL
*Director, North Prescriptive Education Program*
*Portland Public Schools*

## Education, Special Education, Human Education: Notes of Reflection and Action

In the course of making plans for the continuing evolution of our special education programs, we have become increasingly aware of the need to examine, again and perhaps continuously, our beliefs about the products and process of education. We are concerned that so much energy in our schools is directed toward making a child "learn" what children at a particular grade level "are supposed to be learning," toward making a child behave in the way a child of a particular age "should" behave, toward making each child be like other children instead of helping each child become increasingly unique. We are concerned that so much time is devoted to the control of children, and so little to the facilitation of the real business of childhood, the exploration of alternatives. We are concerned that so many considerations other than the needs of a child determine the nature and quality of the child's experience with us. We are concerned that so much of what is expected and demanded of the child results from the pressures upon and the emotional needs of the adults who should be accountable to that child.

Most important of all, we are deeply troubled by what appears to be a widespread inclination to seek and to accept instant solutions to the profound problems that exist in our schools: "solutions" such as a population transfer according to color or age, a new instructional method or set of materials, a more effective technique for making children behave in predetermined ways. It is our belief that the problems will grow ever larger as long as we continue to assure ourselves that we really are doing a pretty good job, that all we need is to become more efficient, that classroom problems are really caused by children who are troubled or deviant or disabled and who "don't belong in the regular classroom" in the first place. We believe that the time has come for us to stop agreeing that a few children, in their efforts to cope with their problems, are creating problems for us; the time has come for us to begin examining the possibility that it is we who are creating the problems for very many of our children.

We believe that an examination of the goals and methods of existing or proposed special education programs must begin with an examination of the goals, methods, and underlying values of the regular education program that the special programs support or to which they are alternatives. Our commitment to "guaranteeing access to public education to *all* children" means little unless we ask, "education for what?" For us, it is no longer enough to develop and implement techniques and methodologies for "educating *all* children" without, at the same time, reexamining our convictions about the nature of the human being, and examining the degree to which our efforts contribute to or interfere with the humanization of our children.

We believe that techniques have to be created and recreated through our reflection and action in the real world. We find it difficult to believe that methods can be mechanistically transplanted in time or space, just as we find it difficult to believe that sound methodologies can be developed in the abstract context alone. We find it difficult to think by isolating theory from practice. We find it difficult to understand facts or methods without understanding the theory of the facts or methods.

For us, this is the very essence of humanity. The human being is not an object, to be known and acted upon; the human being is a *subject*, who reflects and acts upon reality in order to transform it. Not reflection alone—not theory apart from the real world of action: that results only in hollow rhetoric. Not action alone, without reflection; that results in an empty, restless activism. Not reflection alone, and not action alone: but a continuing interaction between the concrete and the theoretical in which our reflection leads us back to the real world on which we are reflecting, in order that our action in the real world may be more effective.

To us, education is never neutral. It either serves to make people more human, by better enabling them to reflect and act upon their world in order to transform it, or it domesticates them, makes them less human, by teaching them that they are objects to be known and acted upon but not subjects who can reflect upon and shape their own lives.

Our vision of a humanizing process of education is one which is characterized, above all, by a commitment to the concept of the human being as a subject, who reflects and acts upon reality in order to transform it, and not as an object, to be known and manipulated. It is a vision which accepts as valid the Coleman Report's conclusion that more important than all school factors together in determining a child's school achievement is the extent to which he believes that he has some control over his own destiny.

Thus, the existence of a compulsory, age-specific, graded curriculum immediately becomes subject to reexamination, in the world which we

envision, as does the view of learners as "containers," or "receptacles" to be "filled" by the teacher. For us, education does not consist of the knowledgeable bestowing the gift of knowledge upon the ignorant; it consists, rather, of learners and teachers interacting and, in their interaction, becoming increasingly capable of examining, understanding, and acting upon their worlds. The teacher discovers those things which can be learned only from interaction with each of the students: the unique learning styles of each of those students at that time in their lives; and, at the same time, the teacher learns, with the students, to reflect and act upon the world in new ways, in ways which enrich the individual and collective lives of both teacher and students. The learners, in addressing interests and problems in their own real worlds, learn, with the teacher, the skills and concepts and attitudes that enable them to communicate, to reflect, and to act effectively in exploring and influencing the external world and in understanding and shaping their own lives. Instruction consists not of discourse, but of dialogue; curriculum consists not of static bits of information to be given or imposed, but rather of the very world which is to be known and acted upon, and of the tools for that examination and transformation.

The details of the educational process here envisioned, and the steps to be taken in its creation, become clearer as we become involved in fashioning it. They are not to be ordained in advance, either by visionaries or functionaries, because the process of actualization must itself be a humanizing one. The vision will become reality as we who will inhabit it come to understand that the world of today is not given and immutable, but is, rather, a reality to be reflected and acted upon, a problem to be solved.

We see human beings as subjects who can reflect and act upon the world in order to change it, and not objects to be known and manipulated. We are committed to education which will serve to make people more human, and not less. We believe that it is in the process of knowing and acting upon today's reality that we shall create tomorrow's.

### Perspective and Role Descriptions

A significant number of children fail to benefit from standard programs of public education. Because it is in the educational setting that children's behavior or learning problems characteristically make their first appearance, it is appropriate that the school function as the central agency to generate preventive or corrective programs. Traditional efforts to deal with these problems by looking to other agencies as primary

sources of diagnostic and independent treatment planning have often overlooked the most potent environment for treatment, namely the classroom and the dynamics associated with the educational process.

The Portland Public Schools are subdivided into three administrative areas, Areas I, II, and III.

The Prescriptive Education Program (PREP) is a multidiscipline effort which provides services to Area II children with learning and behavioral difficulties. The orientation of PREP to such children is an educational one, and the child's teacher is seen as the central member of the treatment team. We believe that difficulties can be treated in the context in which they become manifest, and in which multiple possibilities for meaningful intervention exist.

PREP personnel include diagnostic teachers, reading specialists, psychological examiners, speech clinicians, social workers, and community agents. Staff members work closely with teachers in assessing needs, formulating objectives, planning intervention, developing appropriate instructional and management techniques, carrying our plans, and assessing progress.

Emphasis is placed upon creating learning environments which prevent or ameliorate learning difficulties of students before behavior patterns which might negate a profitable school experience become habitual. This potential can be realized if there are (a) an accurate assessment of an individual child's educational needs and behavioral lacks, (b) a precise prescription of instruction to prevent or treat a particular learning or behavior problem, (c) resources available for fulfilling the educational prescription, and (d) continuing assessment of results.

The matter of continuing assessment is of special importance. Instead of attempting to make definitive plans for individual children on the basis of initial evaluations, staff members and teachers will continually adjust plans in accordance with their observed effects on particular children, and in response to the child's own growth and changing needs.

PREP personnel from various professional disciplines often work as a team in making plans, helping to carry them out, and assessing their effect. In addition to the conferences held between building personnel and PREP staff members, PREP personnel will frequently confer with other PREP staff members not directly involved in working with a particular child or his teacher. Also, during regularly scheduled PREP staff meetings, selected children and their problems are discussed in detail. Because of PREP's emphasis on prevention, staff time tends to be concentrated in the lower grades and intermediate grades.

Children are generally referred to PREP by their classroom teachers.

Referrals may also be initiated by building principals, parents, community agencies outside the school system, physicians or other professionals, or by the child himself.

PREP has developed close, operational ties with Oregon institutions such as the University of Oregon Medical School, University of Oregon College of Education, Oregon College of Education, Community Child Guidance Clinic, Portland State University, Multnomah County Juvenile Court, and Multnomah County Public Welfare. In addition, significant support has been provided for Prescriptive Education Program activities by the United States Office of Education and the Northwest Regional Education Laboratory.

PREP activities include specific features aimed at developing school and community commitment to joint problem-solving; at the same time, the principal focus of the program is on the functioning of each individual child in the school setting. The program recognizes that school personnel are characteristically in an excellent position to insure not only the successful functioning of each student and the acquisition of new behaviors and competencies by each student but also to affect each student's attitude toward school, toward society, and toward himself.

*Program Goals*

The Area II Prescriptive Education Program provides support services for the Area II instructional program, and, as such, serves to support the instructional program goals of Area II. The broader scope of PREP activities was described in materials distributed to area and building administrative personnel in June, 1971. These materials indicated that, in general terms, PREP staff members seek to

(1) make available an increased range of instructional techniques, strategies, and materials so that a child's instructional program can be more easily tailored to meet that child's individual needs;

(2) facilitate the sharing of ideas and feelings among school personnel, parents, and pupils; and

(3) help build the confidence of the child and those who are working with him.

Item 1 is clearly a support activity. Items 2 and 3 also indirectly support the achievement of the present instructional goals of Portland Public Schools while facilitating the attainment of related goals of deep and growing importance in public education.

The following listing of support services provided by PREP is intended

to identify, in each case, the recipient(s) of the service and the nature of the service. "Consultive assistance" may consist of various activities, including but not limited to discussion, provision of printed and other materials, and direct interaction with students, as appropriate.

1. To provide principals and classroom teachers consultative assistance in the development of new options, and expansion of existing options available to students so that an increasing range of student needs can be met without resort to segregation of exceptional children.

2. To provide principals and classroom teachers consultive assistance as requested in the assessment of educational and psychological needs of particular children and groups of children.

3. To provide principals and classroom teachers consultive assistance as requested in the design and implementation of instructional programs for individual children and groups of children.

4. To provide principals and classroom teachers consultive assistance as requested in meeting the emotional and social needs of individual children and groups of chiidren.

5. To provide principals and classroom teachers and community residents consultive assistance as requested in planning and implementing community involvement in school activitics.

6. To provide principals and classroom teachers with in-service opportunities to develop attitudes and techniques with regard to Goals 1-5 above.

7. To meet or correspond with interested individuals or groups, at the request of the superintendent or area superintendent, for the purpose of sharing of information and experiences regarding instructional and support activities.

8. To provide pupils and families with direct services in the areas of speech pathology, school social work, and counseling psychology.

9. To provide teachers, administrators (including the Coordinator of Special Education), and parents with information required for making decisions regarding special placement of exceptional children.

10. To provide pupils and families with information concerning services available from community agencies.

11. To provide preschool children who have special needs and their families with opportunities for participation in early childhood educational activities.

12. To provide parents instruction and guidance to enable them to facilitate their children's learning.

13. To provide professionals and agencies outside Portland Public Schools with information, as requested by pupils or their families, regarding those pupils.

14. To provide means by which teachers, students, and others for whom services are performed can inform PREP as to the adequacy of services.

The following listings are intended to suggest the scope of activities in which PREP staff members may become engaged. It is not expected that any one staff member will become involved in all of these activities, nor is it intended that PREP activities be limited to the ones included on this list. The mode of operation developed by each PREP staff member will be influenced not only by that person's skills and interests, but also by the particular needs of the pupils, parents, and staff of particular buildings.

Reading specialists and diagnostic teachers become involved in similar types of activity. In the case of reading specialists, attention is focused upon the teaching of reading, and specialized techniques of assessment and instruction may be used.

*Diagnostic Teachers and Reading Specialists*

A. Interactions with teachers

1. Confer about roles, goals, progress, and problems.
2. Confer with teacher to identify and clarify pertinent aspects of the problem situation referred by the teacher.
3. Make a joint decision about additional information needed in order to plan solutions.
4. Gather information:
   a. classroom observation
   b. individual testing
   c. small group testing
   d. individual diagnostic teaching
   e. small group diagnostic teaching
5. Confer with classroom teacher to plan strategies for preventing or correcting academic or behavior problems.
6. Help create or obtain instructional materials.
7. Demonstrate use of materials.
8. Work together with teacher in classroom.
9. Help assess progress of pupils.
10. Make joint decisions at regular intervals to continue or to modify instructional planning.
11. Serve as resource for professional readings, clippings, new

techniques, ideas from other schools, new materials.

12. Work with classroom teachers to plan and implement new programs.

13. Help organize available materials (e.g., cross-indexing of Portland Public Schools Language Arts guide; spiral binding of sections of SRA readers).

14. Assist classroom teacher in taking children on field trips.

15. Teach class while teacher is away on field experiences.

16. Work with teachers new to Portland or new to materials currently in use.

17. Attend selected faculty meetings.

B. Interactions with building principal

1. Confer about goals, roles, progress, and problems.
2. Confer about curriculum and instruction:
   a. scheduling
   b. grouping
   c. resources
3. Confer about materials:
   a. purchase
   b. organization
   c. learning center for pupils
   d. teacher center for teachers (including, for example, books, articles, display samples, handouts describing teacher-made or student-made materials).
4. Confer about use of student tutors and adult tutors, and participate in obtaining, training, supervising, and evaluating the work of tutors.
5. Confer about community needs and resources:
   a. parents
   b. volunteers
6. Provide liaison with distributors of educational materials, for school demonstrations, workshops.
7. Confer about individual children and families.

C. Interactions with pupils

1. Test and assess abilities for the purpose of planning group and individual instruction.
2. Direct teaching (short term):
   a. small groups
   b. individual pupils
3. Work with pupils to make instructional materials (e.g., flashcards, tachistoscopes, bingo games).

4. Help children select appropriate materials and books.
5. Help children assess their progress.
6. Group and individual counseling.

D. Interactions with parents (at school or at home)
1. Meet with parents.
2. Meet with parents and other school personnel.
3. Meet with parents and pupils and other school personnel.
4. Work with parents to develop home support for instructional activities.

E. Interaction with other personnel
1. Conferences with teachers and personnel from other agencies, such as Edgefield Lodge and Community Child Guidance Clinic.
2. Liaison with school nurse.
3. Contact with individuals from other agencies.
4. Conferences with or referrals to other PREP personnel.

F. Interactions with tutors (pupils, aides, adult volunteers, high school or college students)
1. Training
2. Providing with materials.
3. Help to assess progress.

G. Interaction with area personnel
1. Committee work.
2. Help in the organization and conducting of workshops.
3. Evaluating new materials.
4. Demonstration of techniques at meetings.
5. Public appearances.
6. Writing for professional journals.

*Psychological Examiners*

1. Assist teachers and educational specialists in identifying, evaluating, planning for, and reevaluating individual children who need some modification in educational programs, through the use of appropriate test instruments, interviews, and classroom observations.
2. Provide school personnel, parents, children, and community agencies with meaningful interpretations of evaluation results that can be translated into practical courses of action.
3. Coordinate school and home efforts to carry out psychological examiner's recommendations through direct contact with parents, children, and school personnel as needed.
4. Serve as a resource person to help teachers, children, and parents

gain better understanding of child behavior, through informal discussions, scheduled meetings, in-service programs, and study groups.

5. Work with individual students, groups of students, and groups of students and teachers in problem-solving and counseling sessions.
6. Work with school personnel, parents, and pupils in selected areas of curriculum planning: e.g., drug education.
7. Help in transition from elementary school to high school.
8. Work with school personnel, pupils, and parents to detect and help solve adjustment problems early in a child's school life.
9. Assess the effectiveness of various modes of intervention and various modes of delivering services that are aimed at preventing or ameliorating learning and behavior problems of school children.

*Speech Clinicians*

The work of speech clinicians with pupils, school personnel, and parents is intended to help children develop oral communication which (a) is effective and (b) does not draw attention to itself. Activities of speech clinicians may include, but need not be limited to, the following:

1. Assessing speech and language of pupils:
   a. Kindergarteners and first graders.
   b. 8th graders.
   c. Children with previously identified speech or language problems.
   d. Children new to the school.
   e. Individual children referred by themselves, parents, or school personnel.
2. Discussing results of these evaluations with classroom teachers.
3. Working with teachers, tutors, or parents to develop and coordinate corrective programs for children with mild speech disorders.
4. Providing direct therapy for children with severe or moderately severe speech or language disorders (hearing, voice, articulation, fluency, delayed or disordered development).
5. Confer with teachers and parents to assess progress and to insure carryover of speech or language training.
6. Serving as a resource person for school personnel about speech, hearing, and language formation.
7. Arranging for referrals to outside agencies as needed (medical, multiple discipline, voice).

8. Counseling with parents at school or at home.
9. Initiating referrals for summer school, speech camp.
10. Conferring with other personnel about evaluation and treatment of individual children.
11. Attending seminars, workshops, and institutes to keep informed about contemporary research and development.

# EAST CLEVELAND PROGRAMS FOR URBAN EDUCATIONAL REDEVELOPMENT THROUGH SELF DIRECTION

LAWRENCE R. PERNEY
*Assistant Superintendent*
*Curriculum and Instruction*
*East Cleveland Public Schools*
*and*
GEORGE R. EPPLEY
*Project Director, E.P.D.A. Program Shaw High School*
*East Cleveland Public Schools*

Educators in an urban school system who want to provide quality education for children must be involved in the dynamics of systemic change. This means that they must do more than redesign the organizational flow chart of the school because too often this only puts new titles on old roles and new labels on old programs. Systemic change means that attitudinally the persons who occupy the roles of administrator, teacher, and student must themselves change. This is especially true in a school system that has experienced a rapid population change in the community it serves. The East Cleveland School District has undergone such a change. In 10 years the school population of 6 elementary schools, 1 junior high school, and 1 senior high school has gone from 99% white to 99% black. Many families have moved in from the ghettoes of Hough, Glenville, and the central city, bringing with them all the disadvantages and deficits of inner city life.

Fortunately, administrators did not try to bend the child to fit into the system; rather they have tried to make the system responsive to the needs of the child. They have found that the formula for systemic change and for quality education is neither mysterious nor elusive. In fact it is so simple and so obvious that one wonders why it has escaped the attention of those who have the responsibility of educating children.

Systemic change is the simple blending of the community, the teaching staff, and the students. The chemistry of systemic change becomes explosive and dangerous when one of the ingredients is missing. Whatever measure of success the East Cleveland School System has achieved in providing quality education for its children and in eliminating to some significant degree the problems of the large urban school (drugs, vandalism, absenteeism, truancy, etc.) has come about because the community, the teachers, and the students have been involved.

## Systemic Change Demands Community Involvement

To say this is not only to recognize some basic assumptions but to have the courage to commit the resources of the system to their implementation:

1. That parents are educators and have the primary responsibility for bringing a child to maturity and productive citizenship.

2. That parents, as educators, are valuable resource persons to a school system because they can tell administrators and teachers what school experiences humanized them and what school experience dehumanized them; they can tell educators what should be included and excluded from the school program.

3. That most parents, as educators, do have a keen interest in their children and want to be involved in an educational process which will give to their children a good self concept as well as knowledge, skill, and competencies that they will need to be successful in an adult world.

4. That parents want to continue their own education by learning at the supper table about the school experiences of their children. When parents and children are both involved in the learning process, education can be very stimulating and exciting, and systemic change can more rapidly and easily be attained.

Furthermore, East Cleveland educators do not assume that all learning takes place within buildings designated as schools. Nor are the only teachers those who have a degree from a college of education. Within the Greater Cleveland community there are museums, historical places, observatories, theaters, businesses, and factories where there are men and women who have special abilities and expertise. The school system has involved these people in extending the learning experience beyond the walls of the school. These people have reached out to the schools and provided rich and varied educational and cultural experiences for the children, and in doing so have been catalysts for change.

## Systemic Change Demands Faculty and Administrator Involvement

In many school systems of this country, it is possible for a child to go from grades K to 12 without ever coming into contact with a genuine teacher, one who is the living embodiment of the hopes and aspirations

of humanity. There is no room in the East Cleveland School system for teachers who will not or cannot continue their education. The system operates not only on the premise that the parent is a learner, that the child is a learner, but that the teacher is a learner as well.

Our society is dynamic and not static. Change is all about us. The knowledge explosion has affected every discipline. Every day there are new breakthroughs in the physical and behavioral sciences. We know more today about the learning process and about learning styles. In the light of this explosion, the teacher who is static and not dynamic, the teacher who is content with the knowledge he acquired in college, has nothing to say to the child who must cope with the world as it is in 1974. Such teachers may survive, but the East Cleveland school system will not provide the haven for their survival.

Long ago educators here have recognized the need for in-service training programs for teachers which are much more substantial than occasional one-day workshops, institutes, or seminars for teachers. Accordingly, the school system has become more and more involved with the colleges and universities of Greater Cleveland. Together, educators from the universities and teachers and administrators from the school system have devised degree and nondegree programs and experiences which are not only meeting the needs of teachers in the schools, but are sensitizing them to the reasons why as many inner-city youngsters turn off the traditional school. Together these teams have given the teachers a larger role in developing mechanisms for teaching, for communicating, and for cooperating that will still continue to be operative even though some of the teachers eventually leave the system.

Among the many programs involving college and school system personnel, three are illustrative of such involvement. At Rozelle Elementary School, the focus has been on giving to teachers diagnostic skills which will enable them to set up individualized programs for disadvantaged youngsters. It was felt that positive change might be most effectively achieved by retraining the teachers at Rozelle in the skills and sensitivities of educational diagnostic skills that have been effectively employed in the field of special education. The program does not intend to make the classroom teacher a special education teacher, but rather to provide the regular classroom teacher with skills that permit individual needs to be recognized and programmed for in the educational setting.

The entire emphasis of the E.P.D.A. project at Rozelle is that of getting down to the specifics of the educational process. If a teacher better understands a child's strengths and weaknesses, the teacher can better understand the child as a unique individual with unique learning

styles and needs, and can better supply the child with the particular individualized educational program that he requires and deserves. At Rozelle, teachers have engaged in the continual process of educational diagnosis, i.e., diagnosing the child's functional strengths and weaknesses in various academic subject areas and in other less academic aspects of school life, delineating the instructional strategies by which the child learns best for each area, and determining the educational materials which stimulate the greatest interest and success for the child.

Another program which has involved teachers and college educators in the process of effecting systemic change has been focused on Kirk Junior High School. Initiated by a private grant from the Martha Holden Jennings Foundation and called the Curriculum Inquiry Program, it utilized the resources of two universities, Cleveland State University and John Carroll University. Working together, teachers and college educators revised the entire organization of the school in order to eliminate the problems of alienation and anonymity that many children were experiencing. By sensitizing teachers to the needs of students, by breaking down the organization of the school into more manageable units, by effectively using the concepts of differentiated staffing, the teachers have been able to create a climate of freedom, awareness, and personal concern. The project will not achieve all of its potential for another year, but it can be reported that this altered approach to junior high education has achieved, within six months, order, stability, and control of the educational climate so that learning is taking place. Even if no further improvement were to occur, the professional educator, the pupil, and the parent have become tolerant and accepting of the educational situation. The flight to private schools among students has been halted. Community unrest has dissipated, and teachers now look forward to an extended employment in this their school.

A similar project aims at effecting systemic change in East Cleveland's only high school. At present a steering committee of administrators, teachers, and students has been meeting weekly since the first of the year to assess the data that have come from a needs and interest questionnaire submitted to teachers and to students. They have also met with various community groups in an effort to see how the community perceives the high school. They have been able to identify strengths and weaknesses of the present system. They have discussed all aspects of the school's program and have come to the conclusion that the high school as presently constituted is not meeting the needs of the students. They are all agreed that the retraining of teachers is a high priority item. They have been negotiating with other colleges and universities to provide on-site gradu-

ate courses in urban education beginning this fall. These three projects involving teachers have one overriding goal humanizing the curriculum of the school so that it is a place where children feel that they are cherished and loved for what they are and for what they can become.

### Systemic Change Demands Responsiveness to the Child

For too long a time educators have paid lip service to the truth that the school exists for children and not children for the school. In American education there have been too many examples of the child being forced to serve the needs of administrators and teachers rather than both serving the needs of the child. Too often the school day, the school year, and the curriculum have been structured by adults to suit the convenience of adults. Children have been forced to follow a pattern of instruction that does not meet their interest and their needs. This lockstep arrangement makes the school environment more pleasing, more confortable, more secure for teachers; but it is a devastating arrangment for the child since it violates most principles of child psychology. Children are not the same. They do not have the same interests, the same needs, the same aspirations, the same intelligence, the same capacity for learning, or the same learning style. It is one thing to state this; it is quite another to translate these beliefs into concrete and meaningful programs that will enhance the self-concept of the child, involve him in the learning process, lead him to take responsibility for his own learning, enrich his school experience, and prepare him to take an active part as a citizen in a democratic society.

There are two programs in East Cleveland which are illustrative of the willingness to change the school and the school calendar to fit the child rather than trying to change the child to fit the school.

First is a program in Early Childhood Development for four- and five-year-old children. The sources of funding for this project have been E.S.E.A. Title I and Health, Education and Welfare (E.P.D.A.) project. Prior to the implementation of this project, East Cleveland children arrived at the threshold of their educational experiences with an average deficit of more than two years in linguistic, perceptual, and cognitive skills a deficit so vast that any compensatory program provided during the elementary years would be hard-pressed to eliminate. Within one year of implementing its program, based on concrete measurable test results, the average level of skills has been raised from the deficit described to a level that would place them well above the national mean. In fact, the average for the system has been raised to the point where the mean

achievement level for the system is at the 65th percentile. Not only has this feat been attained once upon completing its first year of implementation, but it has continued to improve upon this performance for every succeeding class of students extending over a three-year period.

The second program is entitled The East Cleveland Enriched and Extended School Year Program. This program essentially is built around the needs of the pupil. School begins in September and concludes in July. Despite the lengthened school year the child attends no more than 15 additional school days. Its intent is to improve achievement and motivation of students. Fifteen percent of the children in the East Cleveland school system participate in the program. The project was initiated in pilot form under E.S.E.A. Title III and continues under federal funding. It incorporates the major cultural community resources within the Greater Cleveland metropolitan area as its major motivational thrust whereby children receive in-depth instruction for one-week periods of time interspersed throughout and between the various institutions. A secondary result occurring from this program is that some of the institutions involved in this program have achieved national recognition for promotion of the best educational programs provided. Briefly, children in grades one through eight attend school in six, six-week segments—four weeks of schooling, one week of vacation, and one week in residence at a cultural community center. As a result of this program the children and parents can be described as the most "tune-in and tuned-on" group ever to attend an East Cleveland school. More significantly, however, are the achievement changes that have resulted among children participating in the program. It can be absolutely stated that the program has achieved a change in the learning patterns of participants.

In grades one, two, and three the mean improvement in achievement scores was 15%. In grades four through six the mean improvement was 45%. The range of improvement varied between 15-100% among elementary participants.

This school system does not claim to have all the answers to the problems which have plagued urban schools. Nor does it claim to have eliminated the problems of absenteeism, drug abuse, pregnancy, violence, or vandalism. But by getting the community, the school administrators, the teachers, and the students themselves to ask the hard questions about the teaching and the learning process, this school system is coming up with some of the answers.

One question that is always asked: Will such programs prepare these children for life? The answer is that the best preparation for life is to live fully as a child. East Cleveland Schools are attempting to give their students that opportunity.

# THE HOUSTON PLAN–
## Retraining of Regular Classroom Teachers to Work with Handicapped Children Within the Regular Classroom Setting

CHARLES A. MEISGEIER
*Coordinator, Center for Human Resources and Educational Renewal*
*Houston Independent School District*

A core of master teachers are being trained in three demonstration training centers. These Teacher Development Centers (TDC) are in the process of developing operational designs that will demonstrate the efficacy of programming for the handicapped in the regular program through the individualization of the instructional process and the utilization of TDC's differentiated staffing concepts for special education support personnel.

Regular classroom teachers, special education teachers, parents, and leadership personnel are presented with the human, technical, and conceptual skills and strategies necessary for integrating and maintaining handicapped children in the regular classroom. The acquisition of these teaching skills and strategies will be facilitated by the opportunities to observe classroom models, rehearse teaching skills during simulation exercises, and receive immediate feedback concerning approximations to training objectives afforded by the TDC's modular curriculum.

During the next four years, teams from each of the 170 elementary and 70 secondary schools in the Houston Independent School District will rotate through the training center for two five-working-day intervals. By the end of the 1972-73 academic year, six regular classroom teachers in 85 schools and 305 special education teachers provided their school faculties with the instructional models necessary for the success of the handicapped child in the mainstream of Houston's education programs.

Community involvement and organization will be guaranteed by establishing sensitive channels of input for individual parents, community agencies, and active parental associations.

Each child is unique. All education should be special education. The goal of the Houston Plan is to find and meet the educational needs of the individual child. From the most gifted to the most handicapped, each learns in his own individual way and at his own rate. Houston is modifying its learning system to encourage a personalized approach to learning with individualized instruction and a continuous progress curriculum for each child.

Educators recognize that:

children should advance continuously as mastery of essential academic skills is demonstrated;
children should learn how to learn - how to be self-starting learners;
children must learn that they can learn;
children must be protected from constant failure;
children should learn self-discipline and self-respect; and
children must develop marketable skills (and find a measure of satisfaction and pride in employing them).

### Personalized Learning-Individualized Instruction–Continuous Progress Curriculum

The concept of special education as we have known it for the past twenty years is giving way to the urgent need to view each child as special. Through the Houston Plan, Houston's classrooms will provide personalized learning programs and continuous progress curricula conducive to the cognitive, affective, psychomotor, and perceptual development of all children.

### Precision Learning Center

A Precision Learning Center (PLC) is being developed in every elementary school to provide a high-intensity support service for the teacher and the child. Children attending the center for part of each day participate in a precision learning process coordinated by a specialist team that utilizes the most modern instructional equipment, strategies, and materials available. It serves as a resource center for children and teachers and is staffed by learning specialists skilled in both precision and disgnostic teaching and in the uses of specialized instructional materials.

### Educational Plan

Each child in the PLC has an educational plan that specifies:

a. referral data
b. specific learning objectives
c. activities (methods, materials, etc.)
d. consequences (types and schedules of reinforcement)
e. responsibility (participating teachers)
f. evaluation

The PLC is a vital component of a continuum of services available to children ranging from those who exhibit minimal learning or behavior problems to those who are severely disabled, homebound, or hospitalized.

In the past, regular and special education have been parallel systems. Children have moved out of, but seldom back to, the educational mainstream. Through the Houston Plan, the PLC serves as a point of convergence for mainstream and specialized services.

### Teacher Retraining–Classroom Management Systems

The *Teacher Development Centers* are a major vehicle for implementing concrete changes in Houston's classrooms. Through the TDC, Houston has launched a massive retraining program to prepare teachers and supportive personnel of every description to restructure classroom management and delivery systems.

*Behavioral Skills Labs* are an integral part of the Teacher Development Centers. The format of the labs provides an experience based model for the teacher. The teacher is taught the way she is expected to teach.

There are twenty-one self-paced modules organized to provide teachers and other personnel with training and skill development in the areas of: (a) applied behavioral analysis, (b) multiple learning centers, (c) peer and cross-age tutoring, (d) strategies for individualized instruction, and (e) continuous progress curricula.

Teachers are introduced to special instructional materials and learn how to construct their own materials. Follow-up training is provided by high impact Area Services Support Teams.

Each year, over 1,000 teachers participating in TDC activities will demonstrate mastery of the 21 performance objectives of the program.

### New Roles

New roles for educational personnel have emerged with the development of the Houston Plan. Two of the most significant are the Diagnostic-Precision Teacher and the Learning Facilitator.

The *Diagnostic-Precision Teacher* is a consulting teacher. She works directly with children either individually or in small groups. She coordinates the data collection system used to provide the information necessary to formulate educational plans (educational prescriptions) for a child who has a learning or behavioral problem. She works with regular classroom teachers to help them implement educational plans and individualize the curriculum and instruction.

The *Learning Facilitator* coordinates activities in the Precision Learning Center. She implements the educational plans for children coming in and out of the center each day with a wide variety of teaching strategies and special materials.

### Student Services Committee-Support Team

*Student Services Committee*

The Student Services Committee reviews, approves, or modifies the educational plan for each child receiving special services in the regular classroom or PLC. It meets weekly or biweekly in each school. The principal, precision teacher, diagnostic teacher, learning facilitator, counselor, nurse, regular class teacher, and Support Team personnel comprise the committee.

*Area Services Support Teams*

Six area Support Teams operate throughout Houston. They are made up of a mobile staff of consultative personnel who are available to Student Services Committees, learning specialists, principals, and teachers as needed. The Support Teams are part of a new delivery system which provides technical and consultative resources to assist the teacher in day-to-day management of her programs for children with learning or behavior problems. The team is made up of diagnosticians, counselor, psychologists, and various consultants. The Area Services Teams are a major component in the evaluation-feedback procedures that are essential to the ongoing renewal of the Houston Plan.

### Project Training Objectives

*Regular Classroom Teacher*

1. A total of 510 regular teachers will be capable of designing learning environments and instructional strategies which facilitate the effective adaptation and cognitive achievement of at least 1,500 previously labeled special education students.

2. Each regular teacher will be able to plan and develop individual student programming through at least four classroom learning center activities during the school day. This objective includes the preparation of instruction for at least three previously labeled special education students.

3. Regular teacher trainees will be able to measure each student's baseline academic and nonacademic performance, develop daily, weekly,

and monthly terminal instructional objectives, and construct meaningful learning sequences between baseline observations and terminal objectives.

4. Trainees will be able to determine academic response rates and strengthen successive approximations to terminal objectives through concrete and teacher-applied reinforcement contingency plans.

5. Trainees will be able to objectively measure their differential interaction with each student.

### Core Performance Objectives

Given a class with at least three misbehaving students, I will socially punish them by applying three techniques of verbal punishment.

Given a class with at least three misbehaving students, I will socially punish them by applying three techniques of nonverbal punishment.

Given a regular or special education classroom, I will apply the principles of social punishment by decreasing to . . . . the number of times I

. . . . . .

(select two criteria)

Given a class with at least three appropriately responding students, I will socially reinforce them by applying five techniques of social reinforcement (verbally).

Given a class with at least three appropriately responding students, I will socially reinforce them by applying five techniques of social reinforcement (nonverbally).

Given a regular of special education class, I will apply the techniques of social reinforcement by accelerating the number of times I socially reinforce to an average of 30 per hour.

Given chart paper, I will be able to name and post in my room the behaviors that I will reinforce.

Given a list of behaviors that I will reinforce in my room, I will write in a report the incompatible behaviors that I will punish.

Given a model questionnaire, I will administer it to my students to give them the opportunity to name the reinforcers in the classroom.

I will keep an observation checklist for three days of the activities the students pursue when they are given free time.

In a written report I will name at least ten direct reinforcers and at least five indirect reinforcers.

Given a list of reinforcers that are operating in my room, I will write the schedules that are operating by identifying the contingencies.

Given a child's or group's misbehavior, I will identify the behaviors I want to celebrate, the reinforcers, the schedules to be used, and to carry

out a three-week project which would include one week of baseline and two weeks of intervention (select two criteria).

Given a class of children I will set up an indirect reinforcement system which includes the following: (a) behaviors I will reinforce, (b) incompatible behaviors I will punish, (c) reinforcers available, (d) two schedules of reinforcement, (e) indirect reinforcers, (f) three-week chart which includes one week of baseline and two weeks of intervention (select two criteria).

Given a terminal behavior, I will list at least five behavioral objectives in one academic area.

Given a list of five or more behavioral objectives, I will write corresponding pre and post tests.

Given a list of five or more objectives, I will correlate materials for two corresponding learning activities.

Given a classroom I will set up a learning center environment employing at least three centers in at least two academic areas (covering modes of learning or academic content) and a management system for materials.

Given a learning center environment I will set up one system for keeping records on student progress and student teacher conferences which would include center, date, objectives and evaluation.

Following group instruction by the teacher, the children will keep at least one record on skills they are ready to demonstrate and tasks completed.

### Regular Classroom Teacher Training Content Objectives

*BSL refers to Behavioral Skills Lab*

*BSL 1*

To identify the effects of punishment.

To define and describe appropriate methods of punishment.

*BSL 2*

To identify the effects of reinforcement.

To identify and describe appropriate reinforcers.

*BSL 3*

To identify reasons for class rules.

To write rules which can be reinforced and in compatible behaviors.

*BSL 4*

To identify and list three categories of reinforcers.

To write two ways of determining what is reinforcing to my students.

*BSL 5*

To identify the differences between direct and indirect reinforcers.

To classify reinforcers as direct or indirect.

*BSL 6*

To identify and describe three schedules of reinforcement and their effect on behavior.

*BSL 7*

To design a contract for a misbehaving student.

*BSL 8*

To analyze and solve problems which might arise in an indirect reinforcement system.

*BSL 9*

To write the three steps in obtaining self control.

To design a contract a person could make with himself.

*BSL A*

Identify the differences between an individualized and a traditional program.

Describe four steps in setting up an individualized lesson.

*BSL B*

To write a behavioral objective.

Identify the level of the objective according to Bloom's taxonomy.

*BSL C*

To identify the reasons for diagnosis and evaluation.

Write a pre and post test for a given objective.

*BSL D*

To identify any modality required by different activities.

Correlate three activities for a given objective which cover several ways children learn.

*BSL E*

Identify the composition of a learning center.

Identify three kinds of learning centers.

Arrange a room in a learning center environment.

*BSL F*

Identify and prepare ways in which materials may be organized in a learning center environment.

*BSL G*

Identify how records may be used.

Construct two original record forms; describe how and when each will be used and where they will be kept.

*BSL H*

Identify the attributes of a flexible schedule.

Write three different schedules with the same time expenditure sheet.

# THE HARRISON-UNIVERSITY COOPERATIVE RESOURCE CENTER

RICHARD A. JOHNSON
*Director, Special Education*
*Minneapolis Public Schools*
*and*
RITA M. GRISMER
*Coordinator, University Training Programs*
*Minneapolis Public Schools*

During the mid-1960s, special education programs in the Minneapolis area—admidst a dearth of literature and court decisions regarding efficacy and equity—were characterized by the traditional service delivery model of special class placement for all demissions from the regular class setting. Of greatest concern at that time was that group of children labeled Educable Mentally Retarded (EMR). The population in the EMR class was of increasingly higher functioning level with a high incidence of adjustment problems—perhaps a result to some extent of inappropriate educational planning. The university teacher training program's student teaching and practicum experiences consisted of placement in one of these special classes around the city of Minneapolis where students actually "learned" to perpetuate this inappropriate model of service delivery.

## A Cooperative Approach

Although leadership personnel in the Department of Special Education of the Minneapolis Public Schools were cognizant of the need to develop alternative plans for these EMR children, the limited resources available to them in terms of personnel seemed to prohibit the undertaking of the task.

Concurrently, members of the Department of Special Education at the University of Minnesota became increasingly uneasy with the traditional orientation of the practicum settings available to their students. Although discussions of alternatives for handicapped children, the cascade of services model,[1] and the current literature were taking place in the coursework on campus, there was no real opportunity for these students to participate in a changing system of service delivery during their training experiences. The university had no opportunities to participate in planning such a change or no control over quality of local practicum settings.

In the spring of 1968, members of both agencies entered into discussions to determine possible avenues to define and provide for the needs of both agencies. As a result of these discussions, the participating agencies agreed to combine available resources to undertake the task.

*The Mutual Needs*

The needs of both agencies were defined broadly as follows:

1. To develop a prototype model within a Minneapolis Elementary School which will provide an additional alternative for placement of EMR children.

2. To establish a practicum station for university students capable of providing these students with the necessary competencies to become more flexible, individualized teachers of EMR children who would be able to function in a variety of service delivery models.

Inherent in the definition of these needs were some basic premises agreed upon by both agencies. First, this prototype model would be developed as a "resource" for EMR children whose primary placement would be in a regular elementary school class rather than a special class. In order to be of most benefit to Minneapolis Public School children, it must be transferrable to other elementary schools in the city. For this reason, it was to be implemented with funding typically available to any Minneapolis elementary school to whatever extent possible.

Second, as a practicum station, the university must maintain a certain degree of control over case management of special education children within the building. Without such control, to actually change placement practices would be virtually impossible. University students placed within this station would be provided an orientation to "prescriptive education" and teaching by individual instructional objectives. With the stated intent to transfer this model into other buildings, this station would not only provide a pool of appropriately trained teachers for the Minneapolis hiring market, but would also provide employment opportunities for university graduates in similar settings.

*The Joint Appointment*

The above definitions of needs and premises led to the decision to implement such a project by way of appointing a full-time project director to represent both agencies at a selected project site. The project director holds a joint appointment between the University of Minnesota and the Minneapolis Public Schools. An administrative level position in the Department of Special Education, Minneapolis Public Schools was established to enable the project director to operate on an equal level with the building principal in the hierarchy of the school district's organization. Assignment as instructor at the University of Minnesota accompa-

nied the position to enable the project director to act as a full-fledged practicum supervisor. A permanent contractual agreement between the two agencies was developed; it stipulates responsibilities to both agencies and a sharing of salary costs by both agencies. Therefore, the project director's appointment implies a permanent relationship between the university and the public schools for purposes of program development on a long-term basis and is not directly attached to any single undertaking of the two agencies. For this reason—and with an eye toward the future—no categorical label or site location was implied in attaching the label of Coordinator of University Training Programs to the position.

### The Original Setting

The Cooperative Resource Center has been viewed since its inception as a process of development of a service delivery model with a continuous defining and redefining of operational procedures and an ever-changing role to keep pace with the current trends in the rapidly changing profession of Special Education. Therefore, when the Center was established in September 1968 it was little more than a concept that had been allocated certain resources deemed necessary for its development.

The site selected was Adams Elementary School—an inner-city school with a population of approximately 400 regular elementary children and 30 to 40 EMR children. The staff and the principal of the school were committed to the idea of serving these children in regular class with some type of support system from special education. The Center was allocated one regular size classroom, one certified EMR teacher who had previously served as a special class teacher within the building, and a limited amount of new materials and equipment.

Using the guidelines that had been developed for Special Learning Disabilities Resource Programs in Minneapolis as a base, the prototype model began to evolve. Directions for the student teaching and other practicum experiences with a more individualized orientation emulated from the practices employed in the Resource Center.

As the year progressed, however, the Adams School neighborhood began to decline rapidly in population due to the construction of freeways and a generally deteriorating neighborhood environment. As the enrollment steadily decreased, it became obvious that the Resource Center would not have an adequate special education population and ultimately the school itself would close. After one year of operation, the Cooperative Resource Center was, therefore, relocated at the Harrison Elementary School. In retrospect, this need to relocate was as much an

opportunity as a disadvantage. With a new start, the long-term effect of errors and misjudgments in our initial year of operation were obliterated.

### The Harrison-University Cooperative Resource Center

The Harrison Resource Center is a model of service delivery that supports mildly handicapped children whose primary placement is in regular class. It is located in an elementary school serving primarily children who reside in low income federal housing. It is at present a racially inbalanced school with over 50% one-parent families. The total school population is approximately 750, and the Resource Center population ranges from 30 to 40 children. The physical facility consists of one double-sized classroom containing private instruction booths, a variety of equipment, and an array of educational materials that have been accumulated during the four years of operations. Two certified special education teachers and the project director comprise the professional staff. Five or six practicum students from the University of Minnesota's Department of Special Education are placed at the Harrison Resource Center each quarter.

The basic program responsibility assumed by the staff of the resource center is to maintain each child as a participating member in his regular class. In order to carry out this responsibility, a wide range of services for children and a great deal of communication with regular education personnel are required. During our first four years of operation, the staff has directed much of its efforts toward defining a set of operations procedures necessary for this maintenance role. Five groups of procedures have been delineated as integral components of the maintenance process.

*Case Management*

If mildly handicapped children are to benefit from educational experiences in regular classrooms, regular education personnel must be involved in program planning. Shared responsibility for decision-making is essential so that cooperative planning can proceed with a minimum of conflict between special educators and regular teachers.

At Harrison School, special education placement decisions are made by the Pupil Personnel Team. This group includes a psychologist, the principal, the school social worker, the special education teachers, and the regular class teacher involved. The Pupil Personnel Team considers the needs of the individual child and the alternative services available. If a resource program seems most appropriate for his needs an initial placement period in the Resource Center is assigned.

The initial placement, which consists of a half-hour a day for two to three weeks, is a period of testing and evaluation. If necessary, psychological, neurological, or physical examinations are secured during this period, and the social worker discusses the child's problems and the available services with the parents.

Following a student's initial placement in the Center, a case planning conference including essentially the same people involved in the Pupil Personnel Team is convened to evaluate the data gathered during the preceding two or three weeks by the resource teacher and the social worker. This team discusses all facets of the child's background and behavior, defines his strengths and weaknesses, develops realistic instructional and behavioral goals for his educational progress, delineates the role of resource personnel and the regular class personnel in meeting these goals, schedules an appropriate time to spend in each setting, and develops these plans into an educational prescription. All subsequent activities for the child are to follow this prescription which the case planning teams review at least twice each year. Such procedures, though expensive in terms of professional time, greatly enhance cooperation among team members.

*Individualized Instruction*

Once evaluation and prescriptive plans have been thoroughly examined, the Resource Center personnel individualize instruction for each child, who spends from 30 to 90 minutes daily working in the Center. A highly supportive atmosphere, acceptance of the child's current academic and social behavioral level, and reinforcement for the smallest bit of progress is the general orientation of the Center.

The Center staff aspires to help these children develop appropriate social behavior, learn to work independently when possible, acquire academic skills, and participate in discussions in their regular class. To accomplish these goals, the use of individual instructional objectives is employed. Objectives for all facets of the child's behavior are defined, specifically stated, and include the measurement of achievement expected. The development and use of instructional objectives has been judged by the staff as an invaluable procedure for accomplishing the stated goals of the educational prescription.

The program uses various techniques to build a child's learning strengths. For example, a programmed reading may be appropriate for some children who profit from a highly structured, step-by-step approach, a basal reading series may work effectively for the child who can profit from a more traditional approach. Every attempt is made to fit the

most appropriate educational materials to the child's learning characteristics.

Since mildly handicapped children often have a particularly difficult time attending to relevant stimuli and following directions, all available media that might stimulate interest are put to use. Not only available media, but also available *ideas* suggested by creative teachers are used in developing learning experiences for children enrolled in the Center. Instructional tapes, original games, slides, transparencies, progress charts, and teaching machines are often-used teaching aids found in the Resource Center.

*Support to the Regular Classroom Teacher*

As stated earlier, the resource teacher is responsible for providing special education children with skills enabling him to be a *participating* member of the regular class. Since 30-90 minutes per day of individual remedial programming cannot realistically accomplish this goal, additional support must be offered any teacher who accepts a low achieving child into her group. Team prescriptions, therefore, apply not only to the child's needs, but also to any difficulties the teacher may have in coping with the child's deficiencies.

Since some of our children manifest disruptive, uncontrolled behavior in the classroom, some teachers understandably are hesitant to accept them; however, if assistance is readily available, regular class placement becomes far more viable. Until behavior modification programs have become effective in helping a child control his own behavior, the Resource Center may be designated by the team prescription as a "crisis" room for that particular child. Crisis programs for children are carefully monitored and eliminated as soon as possible.

Because regular class teachers are not usually oriented toward gearing instructional activities to unique learning styles, the resource teacher, by adapting activities to the level of the slow learner, encourages all children to participate. The resource teacher assists the classroom teacher in the planning and development of classroom units and acitivities so that mildly handicapped children and other slow learners might learn and achieve. Classroom teachers have used these Center services extensively, particularly in the areas of social studies, science, and health.

Time in the resource room is scheduled to coincide with the unique needs of the child resulting from his learning difficulties. If a child does not read well enough to function in a class reading group, he should be sent to the Center during his reading time. Resource Center personnel must, therefore, be willing to juggle and rejuggle time schedules in accord

with the varying schedules followed in the regular educational program.

*Continuous Evaluation*

The team prescription and the individual instructional objectives are only the beginning point. The evaluation procedures must be an integral part of the resource program if projected progress is to be ensured. So that instructional gaps can be avoided, each child's activities in the Resource Center are recorded daily in his personal log.

The instructional objectives for each child are reviewed and rewritten at the end of each four-week period. The original team prescription, the rate of progress in each area, and the effectiveness of the materials employed are monitored and reconsidered through these reviews.

If at any time the team prescription becomes ineffective, the case plan team is reconvened and a new prescription is developed. The original prescription and the appropriateness of the special education services for each child are reviewed twice annually by the case planning team.

## The Practicum Setting

The Resource Center also serves as a practicum station for students in the Department of Special Education at the University of Minnesota. The practicum experience has evolved from the development of the Resource Center model and represents a significant departure from the traditional student teaching experience.

The orientation of the practicum experience is individualized—not individual—instruction. Five or six students participate and spend twenty hours per week for 12 weeks at the Resouce Center. Each student is assigned his own "case load" of children for which he is given total responsibility. The individualized programs of the children are monitored continuously by the Resource Center staff.

Although students assigned during the first several years were undergraduates in the area of mental retardation, the Resource Center is gradually shifting its university student population to the new Special Education Resource Teacher (SERT) program—a newly developing training program at the graduate level—for general noncategorical resource teachers. Concurrently, the university's Department of Special Education is phasing out the undergraduate training program.

The university staff involved in the development of the SERT program is in the process of defining competencies necessary for general resource teachers and in the future a competency-based program is anticipated. Toward this end, the Harrison Resource Center has delineated five

with the varying schedules followed in the regular educational program.

*Continuous Evaluation*

The team prescription and the individual instructional objectives are only the beginning point. The evaluation procedures must be an integral part of the resource program if projected progress is to be ensured. So that instructional gaps can be avoided, each child's activities in the Resource Center are recorded daily in his personal log.

The instructional objectives for each child are reviewed and rewritten at the end of each four-week period. The original team prescription, the rate of progress in each area, and the effectiveness of the materials employed are monitored and reconsidered through these reviews.

If at any time the team prescription becomes ineffective, the case plan team is reconvened and a new prescription is developed. The original prescription and the appropriateness of the special education services for each child are reviewed twice annually by the case planning team.

## The Practicum Setting

The Resource Center also serves as a practicum station for students in the Department of Special Education at the University of Minnesota. The practicum experience has evolved from the development of the Resource Center model and represents a significant departure from the traditional student teaching experience.

The orientation of the practicum experience is individualized–not individual–instruction. Five or six students participate and spend twenty hours per week for 12 weeks at the Resouce Center. Each student is assigned his own "case load" of children for which he is given total responsibility. The individualized programs of the children are monitored continuously by the Resource Center staff.

Although students assigned during the first several years were undergraduates in the area of mental retardation, the Resource Center is gradually shifting its university student population to the new Special Education Resource Teacher (SERT) program–a newly developing training program at the graduate level–for general noncategorical resource teachers. Concurrently, the university's Department of Special Education is phasing out the undergraduate training program.

The university staff involved in the development of the SERT program is in the process of defining competencies necessary for general resource teachers and in the future a competency-based program is anticipated. Toward this end, the Harrison Resource Center has delineated five

basic skills areas available to these students in the practicum assignment.

*Diagnostic Techniques*

Before an individualized program can be outlined for any one child, it is obviously necessary to determine any specific learning deficits manifested in his performance. Instruction in and administration of a variety of standardized diagnostic instruments are integral parts of the diagnostic procedure. Students are assisted in the interpretation of these tools in order to help plan an appropriate remedial program.

As critical to the individualized plan as the standardized diagnostic instruments is the constructive use of informal observation—both in the Resource Center and the child's regular class. Again, the student is assisted in developing a set of skills which enable him to delineate significant behaviors, chart unacceptable behaviors, interpret informal reading inventories, etc.

*Instruction by Objectives*

Most students who are assigned to the Resource Center for practicum are unfamiliar with instructional objectives and how they are written. Beginning from a very elementary level, students are given instructions and practice in writing relevant, individual objectives appropriate to the needs of each child as determined by the diagnostic procedures they have already employed.

The daily log kept for each child is used as a tool for evaluating progress toward these objectives. All activities used within each child must be directly related to the written objectives, and lack of progress toward these objectives is viewed as either inappropriate instructional techniques or inappropriate objectives. Weekly conferences are held with each student regarding the relationship between the daily logs and the progress toward the objectives.

At the end of each four-week period, the student is required to evaluate these individual objectives, review their relevance and progress, and rewrite them if any revisions are necessary. Both the child's and the practicum student's progress are monitored through this process.

*Remedial Instruction*

The Resource Center has accumulated over the years a large selection of various educational materials for study and experimentation by the practicum students. Time is alloted the students to delve into these various materials, define their best uses, and evaluate their effectiveness.

More importantly, students are given instruction in the relationship of

these various materials, the specific methodological approaches they have learned in the coursework setting, and the specific learning deficits of the children in the Resource Center.

Finally, then, students are required to select and apply appropriate methodology and materials based on the diagnostic information they have acquired for each child.

These three steps geared toward expertise in remedial instruction have been viewed by the students as one of the more valuable opportunities available to them in this practicum setting.

*Behavior Management*

Oftentimes behavior problems will become evident during the informal observation phase of the diagnostic procedure. Since such problems are very likely to result in rejection by the regular class teacher, systems to extinguish these behaviors must be included in the instructional objectives. Appropriate contingency management plans to be developed and monitored by the Resource Center staff are also an integral part of the maintenance process. Practicum students are responsible for modifying such behaviors by learning to effectively apply such contingency management systems.

One of the most prevalent problems seen in the child assigned to the Resource Center is in the area of self-concept. Series of failures, behavioral problems, and learning inadequacies are a few of the contributing factors. Although the staff considers this a nebulous area to pursue, practicum students are encouraged to be particularly reinforcing in their approach, point out continuously the child's strengths and progress, and most importantly view the child with the sincere respect due any worthwhile human being.

*Consultative Skills*

The practicum students assume full participation in the Pupil Personnel Team for purposes of placement as well as case planning. As their term of assignment progresses, the responsibility for presenting information to the team regarding their children increases until they become full-fledged representatives for that child.

In addition, the students are required to meet with each child's regular class teacher on a weekly basis. While building positive relationships with other members of the Harrison School staff, they are continually monitoring the progress of the child and pinpointing areas where the child may just be beginning to encounter difficulties in his regular class. A great deal of staff time has been required in counseling these students in

this area. Maintaining a position of listener, reinforcer, and expert without exhibiting an authoritative attitude has proved most difficult for many of the students. Because of the long-term relationship the Resource Center staff has developed with these regular class teachers, they confer readily with us regarding the students' effectiveness in this role.

## Current Goals and Directions

The Resource Center model of service delivery is seen as an ever-changing process including the redefinition of procedures and population. Perhaps the most notable change in direction is presently in process and will continue to develop. A recent reorganization of administrative structure in the Department of Special Education of the Minneapolis Public Schools will result in the delivery of services to mildly handicapped children without categorical label–a concept that has been under consideration for several years in various parts of the country. The newly developing SERT program for general resource teachers in the Department of Special Education was generated from this same concept. While the Harrison-University Resource Center was originally designed to serve Educable Mentally Retarded children, it now includes learning disabled and hearing impaired children in its population as well. A continued effort to place children according to learning needs and teacher competencies is being pursued.

Although the staff is quite confident in its ability to evaluate the progress of the individual children assigned to the Center, evaluative systems for the total project are just beginning to develop. Refining such evaluation techniques using management by objectives as the mode is a major undertaking for the next two years.

## References

1. Reynolds, M. C. "A Framework for Considering Some Issues in Special Education." *Exceptional Children*, 1962, *28*, 368.

# TEACHER TRAINING: A Cooperative School/University Effort in the Madison Public Schools

JEAN B. McGREW
*Assistant Superintendent, Madison Public Schools*

The teacher industry is in ferment. Perhaps more precisely stated, teachers and the teaching act are under the gun. Voucher systems, accountability, differentiated staffs, free schools, decreasing enrollments, oversupply of teachers, taxpayers' revolts, and constricted budgets are all symptoms of a growing concern—and maybe dissatisfaction—of what is taking place in the classroom. Throw in some court cases and legislation directing education toward new ends and one has to wonder what kind of training can be offered to students about ready to enter the profession that will give them the appropriate skills to cope with the whirl of events around them. This hasn't been much of a problem in the past. Universities trained teachers. Those teachers student taught in schools, and whether or not the product was good or mediocre there probably was a position somewhere in the school system. But that has somewhat changed. School systems are in a "seller's market." No longer are "warm bodies" hired simply because they have appropriate credentials. Teachers are less inclined to respond to the "professional obligation" of assisting in training teachers when they have little or no say in the kind of training the student receives. Never has cooperation between university and cooperating school district been so important.

It was in response to this ferment that the University of Wisconsin and the Madison Public Schools established a joint teacher training committee in 1972. Although the University of Wisconsin utilized other cooperating school systems to train student teachers, the vast majority of clinical experiences occurred in the hometown of Madison. The Madison school system, on the other hand, cooperated with several colleges and universities in the training of student teachers, but by far the largest number came from the University of Wisconsin. Thus, by proximity alone—if for no other reasons—the two institutions were natural "bedfellows" in the teacher training act. But while the logic may have been sound the breaching of the sovereignty of the two institutions was no easy task. The university had to feel comfortable that it maintained its institutional prerogative to train teachers along whatever lines it deemed

to be right. The public school system, on the other hand, had to confirm that it would take an "active" rather than "passive" role and responsibility for the training of teachers given to its charge. Suspicion of the other institution predominated the first efforts of the joint teacher training committee.

As is so often the case, the first efforts of the practitioners and professors focused on a philosophic definition of a good teacher and the corollary of what kind of training program produces such a good teacher. While this was productive in narrowing some definitions and revealing some hidden agendas the committee soon realized that it had to develop some pragmatic propositions of what constituted a good teacher training program. At the risk of being oversimplistic, eight propositions were agreed to. They include the following:

1. A clinical program should have some well-defined statement of objectives. Administrators, cooperating teachers, supervisors, and student teachers/interns should all have a copy of those objectives. In addition, some kind of handbook or operational guidelines should be available to all concerned.

2. Evaluation data should be collected following the clinical experience to evaluate the experience against objectives and guidelines. Such data should be longitudinal in nature to show what changes in the clinical experience or preclinical experience are advisable.

3. Students should have some preclinical experiences in the classroom prior to their major clinical experience. Two half-days a week might be appropriate (this is only a ballpark figure). Here again, some set of objectives, guidelines, and evaluation would be in order.

4. Supervising teachers should have some special training concerning the "Supervision of Student Teachers." Perhaps a course by that name would be appropriate.

5. The student in clinical experience should receive adequate supervision from the university supervisor. While "adequate" is not easily defined, five or six times a semester might seem reasonable if followed up with conferences.

6. Cooperating teachers should have regular in-service sessions (jointly sponsored by Madison Public Schools and the university) concerning teacher training.

7. A clinical experience should be at least a semester long and at least one-half of each regularly scheduled school day.

8. Some central placement office at both the university and in the Madison Public Schools should coordinate all student teacher placements.

Next it was determined that baseline data were necessary to determine the degree to which university departments agreed with these propositions and the degree to which the propositions were being met in the individual departments. Similar baseline data were felt to be necessary from cooperating teachers to determine their feeling of the appropriateness of the propositions agreed to. To this end a questionnaire was devised.

A similar questionnaire was sent to cooperating teachers with the wording appropriately changed to fit their circumstances. From both the university departments and from the cooperating teachers substantial agreement on the propositions was identified. The least agreement was found with proposition No. 8 regarding a "central placement office at both the university and in the Madison Public Schools." The data from the university also revealed a wide variance in actual implementation of these propositions within the departments. The data further indicated a need for public school officials to sit down with university professors in each of the departments to determine how the various propositions might become implemented. Two basic end results have come out of this cooperative enterprise. The need was firmly recognized for the cooperative committee to continue in existence with the authority to determine recommendations that would continually be presented to the top administrators of both institutions. It was further agreed that the primary interfacing between the institutions would take place through this committee.

Secondly, a realignment of financial obligations was determined. Monies that had formerly been paid by the university to teachers and the Madison Public Schools as direct honoraria were redirected into a teacher training development fund. The decision making regarding the expenditure of these monies would rest with committees of teachers in the several disciplines. In addition, the Madison Public Schools obligated itself to a yearly expenditure of approximately $30,000 for the implementation of a student resident program. The student resident program is an intensified student teacher program that obligates the student to participate in the school program for 32 hours a week on the basis of a "program plan" developed jointly by cooperating teachers and the university department. This program plan for the expenditure of any part of the $30,000 must be submitted to the joint committee for approval before any monies can be expended.

The bringing of two monolithic institutions, each with numerous subdivisions, into a cooperative venture has been a difficult process to

achieve. While there are still many problems ahead there are vital signs indicating that such a cooperative effort can succeed to the advantage of both institutions. As indicated in my first sentence, the teacher industry is in ferment. To adequately train teachers in a fast-changing society is going to take the best efforts of both professor and practitioner. To that end we believe the cooperative effort between the University of Wisconsin and the Madison Public Schools is off to a good start.

# A MODEL: THE DEVELOPMENT CENTERS FOR HANDICAPPED MINORS IN THE CALIFORNIA PUBLIC SCHOOLS

AL TUDYMAN
*Director, Special Education*
*Oakland Public Schools*
*and*
LESLIE BRINEGAR
*Associate Superintendent, California State Department of Education*

## History

The California State Legislature, in 1960, became interested in developing pilot projects for child care centers that would accept handicapped children. Up to that time the child care centers, as they were known in the 1940s and 1950s, accepted normal children of working mothers for care and training during the hours that the mothers were working. Later the children centers became facilities which still accepted normal children but under various conditions. At no time were handicapped children enrolled because of the alleged undue care and other problems that always seemed to confront such centers. This was probably very true because the centers were very large in enrollment and class size. The personnel were not trained to work with handicapped children, and the multiplicity of handicaps of the severely impaired children were apparently too great to be handled in what might be termed a normal setting. Therefore, the legislature in the early 1960s established the possibility of trying out four pilot centers for handicapped children who were severely mentally retarded and/or physically handicapped. During the trial period only two school systems accepted this challenge in the beginning; they were Stockton, California and Oakland, California. The results that were found by these two centers and the testimony that was given to the legislature concerning these centers made possible for some of the school districts to develop such children's centers for the handicapped after enabling legislation was passed. This, then, was the beginning of the Development Centers for Handicapped Minors program in California.

## General

The purpose of the legislature in permitting centers for handicapped

children was to continue the pilot centers and others because they had successfully demonstrated that there was a need for such facilities to help handicapped children from an earlier age and that such development centers possibly prevented the breakup of homes through respite from continuous twenty-four hour care of severely handicapped minors. In addition, the development centers were thought to relieve parents to engage in work. The centers also were thought to reduce significantly the demands for institutional or hospital placement. Further, the centers were felt to be accessible to the families without causing the physical dislocation of the children from their families.

At present, there are about eighty Development Centers for Handicapped Minors in the state of California. There is need for more because there are several thousand children on the waiting list for this permissive program. The demand for this kind of service is increasing because of California's new outlook on the care of handicapped persons away from state institutions or hospitals. In other words, many of the children who heretofore were residing in institutions or hospitals are being foster placed and returned to the communities with the understanding that there will be some educational or training services for them.

Each development center is a separate and distinct facility for which an application is approved by the Superintendent of Public Instruction for a specific public school education district or county program. Separate applications are required for the establishment of centers maintained in separate locations even though they are operated by the same district or county program. A class unit is comprised of not more than twelve children within the center enrollment and cannot exceed an average of ten children per class; the latter makes it possible to run smaller teacher-pupil ratios in the classes that have more severely handicapped children.

## Goals

The goals of the Development Centers for Handicapped Minors usually include the following:

1. To acquire and improve the social and self-help skills.
2. To help parents in getting to understand their severely mentally/physically handicapped children.
3. To help to engage the children in activities outside the home.
4. To provide a constructive community alternative to the family in caring for the handicapped child (as against institutionalization).
5. To provide an adequate setting and program to fully observe

and evaluate the children for other existing educational programs in the community.

The program of a development center provides for supervision, instruction, and periodic assessment of the development of each child admitted to the center for determination of the child's readiness for transfer to other programs; and continuance in the program of the development center or discharge from it.

Services are usually offered for a minimum of six hours per day and are authorized to be provided for up to 250 days per year, which means that it can be an all-year program. The program services include, but are not necessarily limited to, supervision, training, medical and psychological assessment, school nursing, feeding, speech, physical and occupational therapy where deemed to be appropriate, transportation to and from the center, and parent counseling.

Most of the programs in the development centers are characterized by informality and a relatively pressure-free atmosphere. Activities include singing, dancing, socialization, manipulation of toys and art materials, and other kinds of perceptual activities. The older children usually have discussions, story circles, gross number work, and some cooking. Play on the playground is both free and mildly organized. Some of the children who need orthopedic care have access to therapy when available. Most of these children require considerable time with the fundamental tasks of care taking, feeding, toileting, control of wandering behavior, self-help tasks, and development of independent skills.

### Physical Facilities

Each facility that houses development center children provides adequate classrooms including toilet and storage areas. No more than one classroom is housed in any room regardless of size unless appropriately partitioned. This avoids jamming too many children in an activity or a room.

It is required that there be available adequate and usable outdoor space, including stationary play equipment. This is necessary so the children are able to develop their physical prowess to the maximum.

Toileting and washing facilities are provided. In no event can there be less than one water closet and one wash basin for each six handicapped children. There also needs to be a tub or a free standing shower for each twenty handicapped children; there are two toilets and two basins for each ten adult employees.

There are adequate facilities for the handling and serving of food for the handicapped children attending the center.

As far as the housing is concerned, at the present time this varies from older schoolrooms to newly built, air-conditioned, and carpeted facilities to rented private and public facilities.

The enrollment of the centers at present varies from twenty to eighty children. This is partly controlled by the allotments of children spaces authorized by the State Advisory Committee, which is controlled by the amount of money that is available from year to year. In some cases, the county programs which, up to the present time have had monies available, have taken on the responsibility of paying the entire cost of the children and consequently ignoring the number of slots assigned by the State Department of Education. This is possible as long as the county or other unit do not demand partial state payment for the extra slots that may be provided.

## Personnel

The governing board of a school district, or county superintendent that has a development center, must employ for each center a supervising head teacher, instructional personnel who possess valid teaching permits, and other persons such as matrons or aides, as is necessary, to operate the program. The children enrolled in a development center must at all times be under the direct supervision of one of the above-mentioned personnel.

Each class unit must have at least one credentialed or permit teacher and one matron or aide. It is also recommended that development centers include representation from both sexes when providing services for handicapped children who are from fourteen to twenty-one years of age.

The supervising head teacher must have a valid teaching credential for the state of California, as well as a credential that permits that person to teach in special education programs. In other words, the supervising head teacher must be a qualified teacher of exceptional children.

The teachers of the classrooms need to have at least a Development Center Instructional Permit, which requires sixty units of college work including courses about exceptional children, nursery education, and early childhood education as well as child growth and development. It is also advised by many of the centers that the teachers have courses in mental deficiency because a common denominator of the development center child is severe mental retardation.

Specialized personnel are also used in the development centers, especially in the field of social work and nursing services. There are other

specialists on a part or full-time basis such as a psychologist, instructional aides, physician, et al. Volunteers are used as available.

### Eligibility for Admission

Most of the centers require that the parent or guardian of each child who applies for the child's admission to the development center give information relative to identification and medical and mental data on the child. Information is considered confidential but is available to authorized personnel and departments under certain circumstances. Most of the centers also require and keep additional information and records regarding application in order to facilitate better placement of the children.

Each center appoints, by law, an Admission Committee consisting of at least three members who are as follows:

1. A licensed physician and surgeon.
2. A person serving as a supervising head teacher of the development center for which the child is being considered for admission.
3. A person who is a psychologist holding a California credential.

The admission of a handicapped child to a development center is made upon the recommendation of the Admissions Committee. In addition to the above personnel, there may be others added to the committee as needed, such as social workers and/or nurses from public agencies, representatives from other organizations, such as the organizations for the physically handicapped, cerebral palsied, or mental retardation, and principals of schools for orthopedically handicapped and the trainable mentally retarded. The Director of Special Education is usually the chairman.

When the committee makes its decision, the parents are notified; eligible children are either enrolled or placed on a waiting list. The continuance, transfer, or discharge of a child enrolled in a development center is always subject to periodic review and recommendation of the Admissions Committee.

The determination of eligibility of a child for admission to a development center includes examinations given by a psychologist, and a licensed physician and surgeon. A child may be eligible for the development center if all of the following apply:

1. He is found to be ineligible for enrollment in a regular day school program.

2. He is found to be ineligible for enrollment in special education programs maintained or authorized to be maintained by a school district or a county superintendent of schools.

3. He is found to have one or more of the following conditions:

a. Serious impairment of locomotion.

b. Severe orthopedic condition.

c. Other disabling conditions which have as their origin mental retardation and/or physical impairment.

d. Severe mental retardation.

4. He is between three and twenty-one years of age.

One criterion for eligibility for admission to a development center is the ability of the child to participate in at least one aspect of the program without danger to himself or others in the performance of daily activities.

## Funding

At the present time, the Superintendent of Public Instruction apportions state funds to the district or county superintendent of school that are operating development centers for handicapped minors to the amount of, but not to exceed, $1.75 per hour of child's attendance earned by such a center. In other words, if a child attends every day for 250 days in a school year, for six hours per day, the center is guaranteed state monies of about $2,625 per child per year; apportionments are controlled by legislative action. In addition, transportation allowances of $389 per unit of average daily attendance prorated on a 175 day school year are also authorized.

Unfortunately, the foregoing amount of money only begins to touch the real costs of operating an adequate Development Center for Handicapped Minors. School districts and county programs are now spending on the average of $5,000 to $6,000 per child per year, and a number of the districts are spending up to $8,000 per child per year.

This amount of financing puts a heavy drain on the local funds of the school district or the county operating a development center. The heavy cost is perhaps one of its weakest points at the present time.

It is obvious that the state at this time probably contributes about 25% of the fiscal help for the operation for the center while the local school district or county pays up to 75%, and more in cases where it operates a center with children in it who are over and beyond the slots alloted by the state.

## The State Advisory Committee on Development Centers for Handicapped Minors

The Advisory Committee on the Development Centers for Handicapped Minors is established for the purpose of setting standards for admissions to centers and to advise the California State Department of Education in the administration and operation of the centers. The Advisory Committee consists of one member from the Department of Social Welfare, a member from the Department of Mental Hygiene, and a member from the State Department of Public Health. There is also a member from the Department of Education, as well as a lay member from the general public, and one parent of a handicapped minor. These appointments are made by the Superintendent of Public Instruction, and he also, at the same time, appoints four members, each from school districts or county school programs having Development Centers for Handicapped Minors.

### Present Problems

1. The state funding is far too low. There should probably be 100% state funding for children enrolled in these centers.

2. The program is not yet an integral part of the public school system. The program is still heavily subsidized by school districts through permissive tax overrides, or by county school departments having special taxing services.

3. The program is permissive and is not mandated at the present. If we accept the right to an education of every child or the zero rejection philosophy for special education, then the Development Center for Handicapped Minors will become an important part in the continuum of special education services in the state.

4. Standards, as to definition of who is a Development Center for Handicapped Minor child, program and evaluation need to be clarified and strengthened.

5. There is a need for more research on goals achieved, transition to other programs, assessment techniques, and general evaluation of the program.

6. There needs to be an edification of the role of public education in the program as it may relate to the roles of other state agencies such as social welfare, public health, and mental hygiene, especially if all children in our society are accepted in our schools and if the program is expanded to accept severely handicapped children from birth to twenty-five years of age or older.

## Impressions

The Development Centers for Handicapped Children in the California Public Schools is a program that is much needed if the states live up to a philosophy of providing educational and training services for all of its children. Many of the children in the development centers, up to ten years ago in California, were excluded from any kind of program, including special programs for physically handicapped and the trainable mentally retarded. The program has proven beyond a doubt that it has many educational values in terms of our present broad definition of education.

An original reason for establishing these centers was not as moralistic as much as it was financial. At the times, in the late fifties and early sixties, it was estimated that the development centers could care for such children much more cheaply than a twenty-four hour-a-day hospital or institution; this was probably true at the time. At the present, however, it has been stated that (in California) it costs an average of $1,500 per month to maintain an individual in a state institution or hospital. At the same time, the development centers are now, in some cases, paying up to $8,000 per year per child for a six-hour program that does not include caretaker's fees, foster home placement, medical and other kinds of needs such as food, clothing, room, and board. The taxpayer deserves to know what the real costs are in all of these cases. The taxpayer also deserves to know what the development centers can do for such children. When they have all of this information, the taxpayer should decide whether or not, morally, fiscally, or otherwise, the role of the Development Center for Handicapped Minors should be in the future role of public education.

SECTION III

# UNIVERSITY PROGRAMS IN TEACHER TRAINING

*This section is devoted to university-centered projects involved in the training of teachers to provide for the needs of handicapped children in diverse educational settings.*

## The Miami Program: Training Regular Teachers in Learning Disabilities

An educational training design with media products that include a 16 mm color film "Think About What . . . ?" a slide presentation, and a presentation manual developed at the 1971-72 Institute have been completed. The training module that the program represents is designed to create both an awareness of and desire for additional knowledge that will lead to the improvement of present-day educational programming for teaching handicapped children within the mainstream.

The philosophy of this content and process based training module in learning disabilities is one that includes a broader scope of concern in terms of looking at children with learning problems than those programs that limit the category to children with known cerebral dysfunction. There is a great need for teachers who will identify "high risk" children early, especially in the primary grades, and utilize those techniques that will facilitate more efficient learning.

Regular and special education teachers with appropriate training can, in effect, do a great deal of intervention at all grade levels, especially where faulty learning habits have been established because of perceptual motor or language deficits.

Training goals of the program (readily adaptable for in-service training) are:

The development of an awareness in the trainee of different learning styles of children with special attention given to the learning disabled child.

To make the trainee aware of the need for improved training of those responsible for the education of children with learning difficulties, to include teachers, administrators, as well as paraprofessionals.

To make the trainee aware of the need for different programs and facilities for children with learning problems.

To illustrate the need for a community effort in terms of meeting the needs of learning handicapped children.

### The Pennsylvania State University Program: The CARE Series: Computer Assisted Instruction Courses in Special Education for General Educators

For the past two years, Pennsylvania State University has operated a mobile computer-based program of instruction designed for teachers and administrators of typical classrooms. A computer-mediated course of instruction, called CARE 1, was developed by the faculty and focused on teaching educators to recognize children's handicapping conditions. The CARE 1 course carries three graduate level credits and has been completed by more than 2,000 teachers and other educators at a variety of locations in the nation. The two major features of the program are the self-contained, individualized nature of the instruction and the broad flexibility and convenience of the instruction for teachers who can fit courses in around the demands of their jobs and personal commitments.

Since January 1971, the Pennsylvania State University has offered this course (CARE 1), entitled "Early Identification of Handicapped Children." The purpose of this session is to describe the content of the Early Identification course as well as several other courses which are complete or in development stages. Brief summaries of the following courses are made:

Care 1: Early Identification of Handicapped Children
Care 2: Diagnostic Teaching of Preschool Children
Care 3: Daignostic Teaching of Primary Children
Care 4: Education of the Visually Handicapped
Care 5: Education of the Hearing Handicapped
Care 6: Teaching Severely Retarded Children

### The Vermont Program: Consulting Teaching Program

The Consulting Teacher Program was developed, and is being implemented, as a cooperative venture of the Vermont Department of Education, local school districts, and the University of Vermont, Special Education Program, with support from USOE, Bureau of Education for the Handicapped and Bureau for Educational Personnel Development. The Consulting Teacher Program provides special education services to children traditionally labeled as learning disabled, mentally retarded, and emotionally disturbed within regular classrooms in the areas of language,

arithmetic, and social interaction through consultation and training of regular classroom teachers, school administrators, and the parents of referred children.

### The Florida State Program: Clinical Teacher Model for Interrelated Areas of Special Education

The establishment and evaluation of a Clinical Teacher Model at Florida State University is supported by the Bureau of Education for the Handicapped as a special project. The goal of the interdisciplinary development and research activity is the preparation of a generic special education teacher for mildly handicapped children (educable mentally retarded, learning disabled and emotionally disturbed). Linking the heritage of the field with the potential of contemporary instructional systems and technology provides the opportunity for designing, testing, and documenting the effectiveness and efficiency of proposed changes in teacher education. The Model offers performance-based, criterion-referenced, multimedia, computer-managed, individualized, and personalized instructional modules.

Field testing of the prototype curricula in special education learning resource centers in north Florida and south Georgia will document that explicit clinical teaching competencies (observation, diagnosis, intervention, and evaluation) can produce the pupil behaviors (academic and social) for succeeding in the mainstream of public school education.

### University of Kentucky Program: Programmed Environments for the Developmentally Retarded

This project was designed to develop programmed educational interventions for developmentally retarded children commonly called "trainable" or "severely retarded." The objectives of this project are: (1) to develop a programmed environment model for the preschool education of children assumed to be severely retarded/multiply handicapped; (2) to develop the Teacher Tutor model through the dissemination of Systematic Language Instruction; (3) to list national research and curriculum development activities which relate to preschool children assumed to be severely retarded/multiply handicapped and to the young "trainable" retarded child; (4) to develop competency-based instructional modules for training and retraining staff for Programmed Environment Preschools for individuals assumed to be severely retarded.

These objectives will be met through a coordinated program of research, program model development, and curriculum development and dissemination. This presentation will further develop these goals and plans for implementation.

# TRAINING REGULAR TEACHERS IN LEARNING DISABILITIES

PHILIP H. MANN
*Director, Special Education Developmental and Technical Assistance Center*
*University of Miami*
*and*
ROSE MARIE McCLUNG
*Assistant Director, Special Education Developmental and Technical Assistance Center*
*University of Miami*

After five years of program development designed to train regular teachers to become more effective and humanistic change agents for children manifesting a variety of behavioral and learning disorders, we as teacher trainers submit the following observations on the relevancy, immediacy, practicality, and reality of such training offered through in-service as well as preservice experiences.

As the competition increases for the decreasing number of available positions in regular education, and as recognition by special education and regular education of the right of all children to an education regardless of labels becomes a major issue, we can no longer afford to pay lip service to the quality of pre-service and in-service education for teachers. The tight job market will gradually force institutions of higher education to become more accountable in the preparation of educators to meet the needs of all children. The days of providing beginning teachers with enough basic skills and enthusiasm to get through the first few years on the job are over. Pressures on the new teachers as well as on the career teacher with experience have cut the allowable percentage of failure close to zero.

Teachers, especially in today's large urban centers who may be lockstepped into a curriculum selected and imposed from outside the reality of the classroom, baffled by the mystique of teaching systems and educational assessment, and threatened by parents demanding change, are fearful of the repercussions of accountability. There is a reluctance to give up the safety of labels for children and a resistance to accept educational alternatives that may help the atypical learner, especially when decisions for the placement of the child are made by ancillary personnel away

from the classroom. Successful mainstreaming of the atypical learner within the regular class milieu will not occur unless there are strong support systems as well as systematic and intensive in-service training programs that take into consideration the power structure of the total education system in which the individual teachers must operate daily.

Educators are expressing concern over the amount of time required through in-service training activities to train teachers to do the kinds of things that should have been built in at the preservice level. Since most in-service training emphasizes programs and materials rather than learning problems, teachers who want to know why students are not learning have become somewhat chary in accepting "new techniques" and in participating in in-service training that imposes more demands on their time. Unfortunately, unless a credit for professional growth or certification or a monetary award is given, or some other coersion from within the power structure of the system is imposed, many teachers will not volunteer for "just another program."

In-service training has been inhibited by the fragmentation of training into mutually exclusive categories where the atypical learner is concerned such as "remedial language arts for the intermediate grades," "Teaching the Dyslexic Child," or "Teaching the Hyperkinetic Child." Our approach is to focus on developmental learning on a continuum. In training regular classroom teachers to understand learning problems in children, it is important for the intermediate level teacher to understand why a student failed in the primary grades, or in effect, how he was taught. Regardless of the levels of training or the nature of training (preservice or in-service) there are commonalities of concern that are expressed by all educators. Within our program we have attempted to identify and analyze these commonalities in depth with the expectation that this type of training would lead to improved learning for children and better communication between and among professionals dedicated to meeting the educational needs of all children.

The following is a brief summary of the common areas of concern and how our approach to teacher training at the in-service level has dealt with these concerns:

### Cordination of the Forces of Change

Before a viable in-service training program can be implemented in an individual school or a school system the social, economic, and political forces of change within the power structure must be ascertained. The regular classroom teacher is at the mercy of people at many levels. He

should not be asked to effect change in children apart from the support systems within the hierarchy of the total system. Therefore, the initial planning and needs assessment meetings should include the superintendent of schools or his designates, supervisors, principals, regular teachers, and representatives of special interest groups (i.e., special education funded projects, etc.). It is imperative that representatives from existing programs providing special education services become actively involved in the planning phase of any program dealing with handicapped children.

To facilitate needs assessment, our approach has been to bring to the planning groups a broad range of parameters and options for the implementation of programs using a cascade approach specifically focusing upon identifying learning or behavioral disorders in children initially and then delineating programs or technology where the educational needs of specific children can best be served. After the target population has been identified, training needs are then specified and the levels of concern (i.e., primary, intermediate, secondary) are delineated, as well as the specific types of services and programs that can be made available. A vital point of discussion in any planning session must be the commitments, no matter how small those who represent the various levels within the power structure are willing to give. Time, followup, flexibility of environmental change, materials, etc., must be carefully examined so that clear-cut lines of communication are established and, even more importantly, remain open.

### Formal and Informal Assessment

Many of the teachers we work with place assessment near the top of their list of in-service needs regardless of level. Testing to many of them has become a ritual that occurs at designated times during the year and that must be accomplished with as little frustration and "hassle" as possible. The results often affect the labels used and, more importantly, the expectations of their students; with more accountability today even security of the teacher's job possibly may be threatened. For all the time and effort utilized in administering achievement tests, the results may not be directly affecting desired individualized instruction for children with specific learning needs. We feel that regular classroom teachers can become more sophisticated in their use of different types of achievement tests for diagnostic purposes. By analyzing the reliability and validity of tests as well as the complexity of the directions, the format, and the parameters covered in the content, teachers can better understand the elusive "why" of the performance of children that do very poorly on these tests as well as in the particular skill areas of concern.

We have developed observational check lists and developmental inventories at the task level (i.e., reading, writing, spelling, arithmetic) and the deficit levels (i.e., perception, imagery, language, etc.) that can be administered within the time commitment the regular teacher ordinarily allots to the evaluation of children with learning problems. Diagnosis must occur early in the school year and be ongoing in nature, yet manageable for the individual teacher. We have found that the regular teacher isn't quite as concerned with the development of an extensive battery of screening instruments or the acquisition of diagnostic skills in administering tests as he is in relating the bits and pieces of information to the ongoing curriculum, the behaviors of the learner, and the materials that will be used in instruction. They want to know what is critical, what the prerequisites to success are, and where do they start after the initial assessment has been completed. In our training we emphasize the relationship between the deficit areas that interfere with success at the tasks or reading, writing, spelling, etc., and how these can be ameliorated and continuously evaluated separately and as a part of the total language arts program. The prime opportunities for assessment must become a part of the teacher's daily concerns.

Another aspect of assessment in the training of regular teachers is the use of ancillary personnel as support systems. The referral systems utilizing psychologists, social workers, resource personnel, and the interpretation of their data back to the classroom teachers is another common concern.

As teacher trainers prepare the regular teacher to utilize diagnostic procedures to gain information on children's learning styles and levels of performance they must at the same time allay the fears of administrators and ancillary personnel in terms of infringements into their level of expertise. If relevant diagnostic skills are given to the teacher along with the training necessary to communicate information to support individuals, we feel there will be a reduction in inappropriate referrals and less "copping out" when a child isn't learning and the pressure mounts for a solution to the problem.

## Curriculum Technology

The instructional basis of our training program is a learning design (fig. 1) that indicates the important parameters of children's learning patterns. In evaluating learning difficulties the teacher needs to look at the learner's level of development with reference to where he breaks down in the learning process or, more specifically, to determine the problem areas that prevent him from learning a given task. Although a

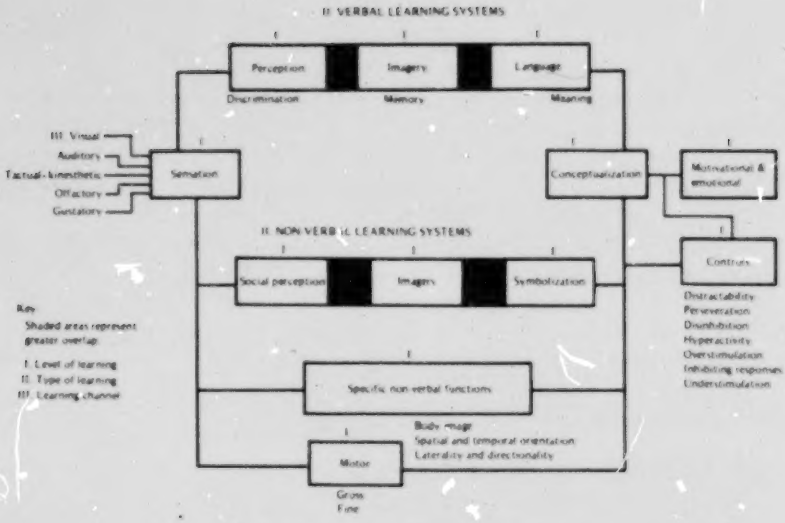



FIGURE 1. Design of Correlates for Diagnosis and Amelioration of Learning Problems in Children

student may seem to have normal achievement possibilities and the potential to learn in some areas for his age, other areas may be weak and he will need special instruction or remediation that takes into consideration his specific problems. After the teacher has been trained to use this framework to identify the strengths and weaknesses in children's learning processes, specific initial teaching and amelioration programs can be developed for each student.

The development of a sequential educational curriculum for individual children depends upon analysis of behavior within the total environment, including the material as well as the physical setting. Curriculum options must be based on the learning styles of the children and the development of prerequisite critical skills necessary for success at the task level areas of reading, writing, spelling, and arithmetic. Since no one program can serve all purposes, it is imperative that teachers be able to select appropriate sections from all available systems of particular learning needs. This eclectic approach forces the teacher to pull together the best of all available resources.

In the application of teaching strategies, teachers at all levels should use the "principle of plateau"; that is, no child remains in the same place in the skill area of concern for extended periods of time without justifi-

able explanation. For the learner, success must be the mode rather than the exception. The teachers learn to apply this principle by adjusting the rate, amount, and sequence of input according to the child's needs. When the child reaches a point of failure, the teacher takes him back to his last accurate achievement and leaves him with a good model and the feeling of success. Our program can be described as humanistic in that it emphasizes success to the extent that it attempts to change the life-style of children who have been school failures and, consequently, have become failure-avoiding in their attitude toward learning, to one that can be described as more success striving. The interface between special education and regular classroom teachers must be a component of every viable in-service model. By acquiring a common core of competencies and by having opportunities to work in concert with each other, they can develop a more appropriate educational climate for children. There must be a sharing of responsibility for the learning handicapped students who are failing in our public schools. Special and regular educators must be continually cognizant of the fact that each learner is an individual, uniquely different in physical characteristics, personality, and general capacity but capable of learning and making a contribution. There must be a dialogue and a concern for the consideration of likenesses so that the concerns for differences are kept in proper perspective.

## Environment

The analytical or learning problems approach to meeting the needs of handicapped children lends itself to implementation in many different educational settings. Traditional as well as open schools can readily adapt diagnostic teaching techniques as long as the basic philosophy of the school incorporates the principle of meeting individual needs or, more specifically, of individualizing instruction. A building does not facilitate learning; people do. Therefore, an in-service program that is child centered should turn out teachers that are flexible in structuring the environment.

Teachers trained in our program are taught how to modify available space, to develop learning centers, and to evaluate the physical structure in terms of noise, lighting, and mobility for the learner. It is recommended that representatives from the custodial staff of a system or individual school be included in the training when maintenance equipment, storage, or structural changes are anticipated.

An important aspect of the training is relating the environment to the parameters in the learning design (fig. 1). Failure in school is contributed

to in many cases, significantly, by environments that may be incongruous with the learning patterns of students or even with the teaching styles of teachers. For example, children with deficits in the auditory channel who are placed in large open classrooms may fatigue easily because they expend more than the usual amount of energy in attempting to attend to many different tasks with excessive environmental stimulation present.

Materials and media must be considered as an integral part of the environment that must be modified accordingly for the learning disabled child. Success or failure for many learners is determined not only by the expectations, intentions, and skills the teacher brings to the task, but also by the interpretation and organization of the myriad of commercial materials, systems, and programs that are available. The dilemma isn't so much where to obtain materials any more as it is the evaluation of available materials for their functionality and appropriateness. Teachers must become skilled at analyzing materials by level of presentation and relationships to the learning correlates that comprise the skills needed to learn particular academic skills.

The organization of materials and media for use by learners must be carefully planned for individualized instruction to become a reality in large classrooms. Children can be taught to incorporate many manipulative materials and media as part of their everyday learning experiences, in an incidental fashion. They can be taught to utilize the "machinery" through actual involvement while learning a specific task, such as arithmetic. Therefore, the task (arithmetic) itself becomes the focal point, the media merely the vehicle used to enhance the learning of the task.

It appears that there is a great deal available within the school and the classroom that teachers do not utilize. Many teachers are "material bound" by things that they have grown accustomed to using over the years, particularly textbooks, chalkboards, etc. Visuals, manipulatives, and listening devices if used appropriately as reinforcers to learning can aid the child at the learning task. This is especially true for children who exhibit learning or behavioral disorders.

### Community Involvement

The first assumption that educators must make is that the community cares. Parents and grandparents, regardless of socioeconomic level, want their children to learn. They want a better life for their children than they had for themselves. Schools for many parents have become alien territory. How are we going to build enough humanism into our educational programs so that the community will want us to become a part of their internal life systems.

The concerns of parents vary. Some are confused by the labels used to describe the atypical learner. Others are more concerned about the movement from special class to regular class placement. They want more guarantees of success for their children. The options, realistic expectations, and skills of educators working with the child are being questioned and held accountable. Communication with the parents is a vital part of "mainstreaming" children.

Through meetings, conferences, telephone calls, etc., parents can be informed of the program's objective as well as of an individual learner's progress. In communication with the parents, teachers are encouraged to describe learning in terms of behavior rather than using labels or by ranking the child within the classroom.

Community in a broad sense includes more than the relationship between home and school. The educational community as a group can be a viable force which can be brought to bear upon influencing legislation and mustering community support for educational programs.

The religious community can contribute valuable support systems for tutoring and after-school programs. Members of the business community can influence school boards and are in a position to support educational programs for the handicapped. Service organizations provide volunteers, materials, and monetary support. In a larger sense the teacher and parent, through interaction with the community at large and with each other, come to feel that they are not alone in what may appear to be the overwhelming task of providing for the needs of the handicapped child. In-service training should include parent representation at appropriate times.

### Behavior Management

Behavior management is probably one of the most common areas of concern at all levels. The shaping of behavior takes many forms and can be implemented in a variety of educational settings if used appropriately. Systematic approaches to dealing with aberrant behavior in children as well as modifying the behavior of all who are involved with the handicapped child has been an integral part of our training program. Without systematic structure and use of proven systems that produce desired changes in behavior the teacher is reduced to a mere trial and error existence, and his curriculum efforts are often eclipsed by overt behavioral manifestations giving the impression that the learning environment is lacking in discipline.

The essence of good behavior management is found in the use of appropriate structure rather than in the automatic application of accus-

tomed techniques. The regular classroom teacher must first understand the meaning behind exhibited behaviors, especially where learning handicapped children are concerned, since aggression or acting-out, withdrawal, hyperactivity, distractibility, etc., all have multiple causations. In understanding aberrant behavior it is felt that the regular classroom teacher will not be as fearful or as threatened in being thrust into situations that are noxious as well as incongruent to him in comparison with his particular life-style.

## Summary

Common elements exist at all levels of education when dealing with the needs of handicapped students. The old "pass the buck" routine is just not acceptable any more. We're running out of programs, and recent trends and new laws are telling us that we had better get on with the task of teaching children regardless of labels or tracks, or someone else is going to do the job for us. Schools are less the eminent domain of educators today than ever before in the history of formalized public education. It has become more the domain of children and rightly so. This means that every child has a right to a free public education, and his parents have the right to see that this is accomplished. Perhaps this is the most important lesson for regular educators to learn. Since we gave the regular classroom teacher the labels to begin with, however, and since we set up the rules of the game with respect to grouping, excluding, segregation, and even the books one uses to teach, then perhaps we must refrain from being as harsh as we can be in trying to change the system quickly. We owe that regular classroom teacher the opportunities for change as well as the time and understanding that it will take to accomplish this task.

# CARE:
# Computer Assisted Renewal Education

KEITH A. HALL
*Associate Professor, College of Education*
*and Director, CAI Laboratory*
*The Pennsylvania State University*

G. PHILLIP CARTWRIGHT
*Associate Professor, Special Education*
*and Assistant Director, CAI Laboratory*
*The Pennsylvania State University*
*and*
HAROLD E. MITZEL
*Professor, Psychology and Education*
*and Associate Dean for Research*
*The Pennsylvania State University*

In November of 1970 the staff of The Pennsylvania State University inaugurated a new and sophisticated computer-mediated instructional technology into its in-service education renewal program for teachers. This instructional program in special education is designed to assist regular classroom teachers in identifying the problems of handicapped children. The present operational schedule and equipment configuration allows approximately 1,000 educators each year to complete this computer-mediated program in their home community in rural Pennsylvania.

## Curriculum: CARE 1

Professors G. Phillip Cartwright and Carol A. Cartwright led a team of university faculty members in developing the graduate level course entitled "Computer Assisted Remedial Education (CARE): Introduction to the Education of Exceptional Children." The purpose of the course is to give educational personnel the knowledge and skills necessary to deal effectively with children who have educational problems.

The course is appropriate for teachers of all grade levels, but especially for preschool and elementary school teachers who are regular classroom teachers and *not* teachers of special classes. The course is designed also to be of interest to other educational personnel such as principals and other

administrators and supervisors; special class supervisors; school nurses; psychologists; aides; music, art, shop, and physical education specialists; special services personnel, and other school related personnel, including day care workers.

The CARE course is designed to prepare in-service preschool and primary level elementary teachers and other interested persons to know the characteristics of, and be able to identify, handicapped children. Handicapped children are defined, for purposes of this course, to be those children who have atypical conditions or characteristics which have relevance for educational programming. Handicapped children include children who display deviations from normal behavior in any of the following domains: (a) cognitive, (b) affective, and (c) psychomotor.

The philosophy of the course is such that teachers are encouraged to look at children as individuals. The use of traditional categories or labels is minimal. However, certain terms and concepts related to handicapping conditions are taught so that persons who take this course are better able to communicate with other professionals in the field.

Upon completion of the CAI course, participants will:

a. Know the characteristics of handicapped children and be aware of symptoms that are indicative of potential learning problems;

b. Be able to screen all children in regular classroom programs for deviations and determine the extent of the inter-individual differences;

c. Be able to select and use for those children with deviations appropriate commercial and teacher-constructed appraisal and diagnostic procedures in order to obtain more precise information as to the nature of the deviation;

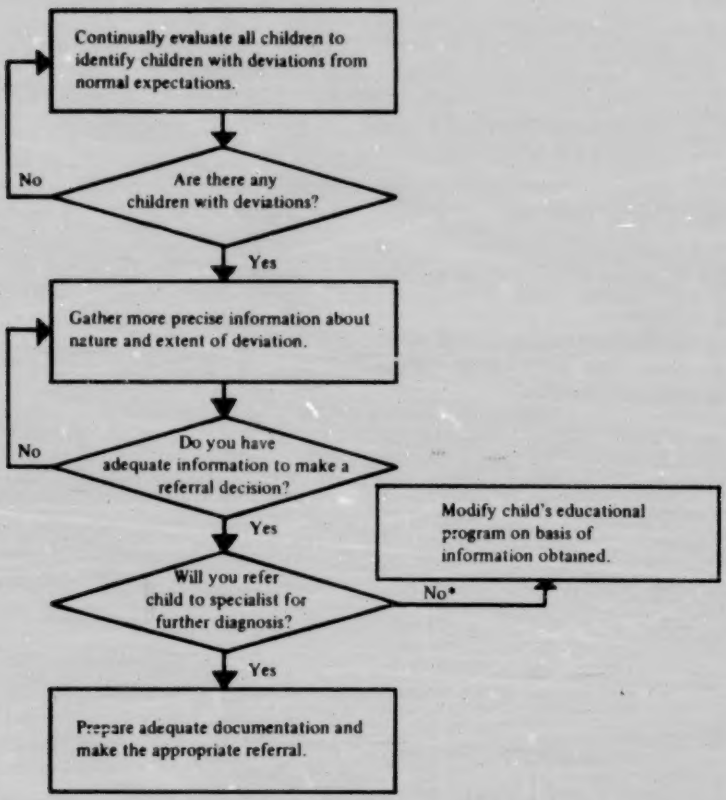
d. Be able to synthesize information by preparing individual profiles of each child's strengths and weaknesses on educationally relevant variables;

e. Be able to evaluate the adequacy of the information in order to make appropriate decisions about referral to specialists; and

f. Be able to prepare adequate documentation for the case if the decision to refer is affirmative.

It is expected that the teachers who exhibit the competencies listed above will systematically evaluate children's learning potential and formulate appropriate educational plans. The six major objectives are correlated with the CARE I Decision Process Model (fig. 1).

*(See fig. 1 facing page)*


Continually evaluate all children to identify children with deviations from normal expectations.
No
Are there any children with deviations?
Yes
Gather more precise information about nature and extent of deviation.
No
Do you have adequate information to make a referral decision?
Yes
Modify child's educational program on basis of information obtained.
Will you refer child to specialist for further diagnosis?
No*
Yes
Prepare adequate documentation and make the appropriate referral.

*This step is the subject of the second decision model.

Fig. 1. Decision Model for the Identification of Handicapped Children.

### CARE 2 and CARE 3: Diagnostic Prescriptive Teaching of Preschool and Primary Teachers

CARE 2 and CARE 3 are designed to prepare teachers of preschool children (CARE 2) and teachers of primary grade children (CARE 3) as well as child care workers to work effectively with children who may be experiencing learning difficulties. An important component of the CARE 2 and CARE 3 courses is the Diagnostic Teaching Model (fig. 2), which

provides teaching personnel with an outline of procedures to follow as they deal with children's learning problems both in the affective and cognitive domains.

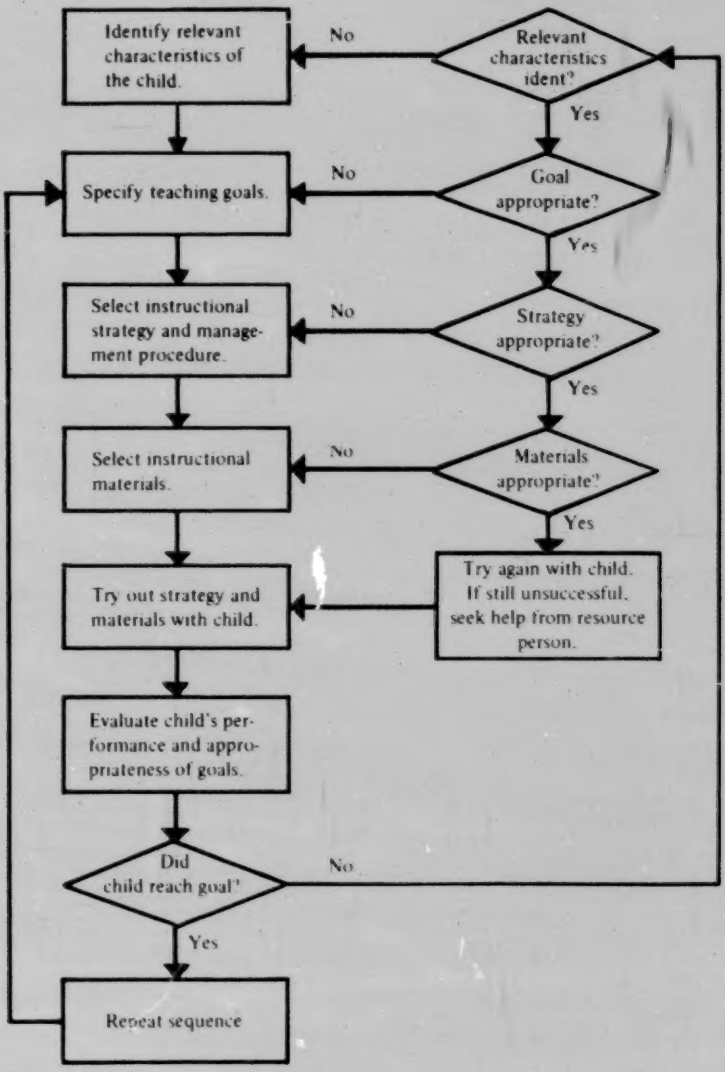



Fig. 2. Decision Model for Diagnostic Teaching.

The Diagnostic Teaching Model is applicable to both preservice and in-service training of special educators and regular elementary teachers. The following eight objectives delineate the basic set of global competencies that are required to carry out the model:

a. Identify characteristics of individual children that indicate special teaching or management procedures are required;

b. Specify relevant educational objectives for individual children;

c. Select techniques for effective classroom management;

d. Choose and use specialized teaching strategies for teaching specific objectives for children with varying behavioral and learning characteristics;

e. Choose and use special materials in association with specific strategies;

f. Identify and use appropriate evaluation procedures;

g. Draw upon existing sources of information regarding specialized strategies and materials;

h. Consult with available resource persons for assistance.

A modular approach, illustrated in Fig. 3, was used in the development of CARE 2 and CARE 3. Both courses share a core of information, procedures, and strategies. The examples and simulated case studies in which students apply the principles, however, are appropriate for the age group of children to which each is directed.

### CARE 4: Education of Visually Handicapped Children

CARE 4, or "Education of Visually Handicapped Children," focuses on teaching children who are partially sighted or blind. The purpose of the course is to equip elementary and secondary classroom teachers and other school personnel with the knowledge and skills necessary to work effectively with visually handicapped children in their regular classes. Content is appropriate for both in-service and preservice children.

The course objectives for CARE 4 are designed to enable the student to apply the Diagnostic Teaching Model developed for CARE 2 and CARE 3 to the teaching of children with limited vision.

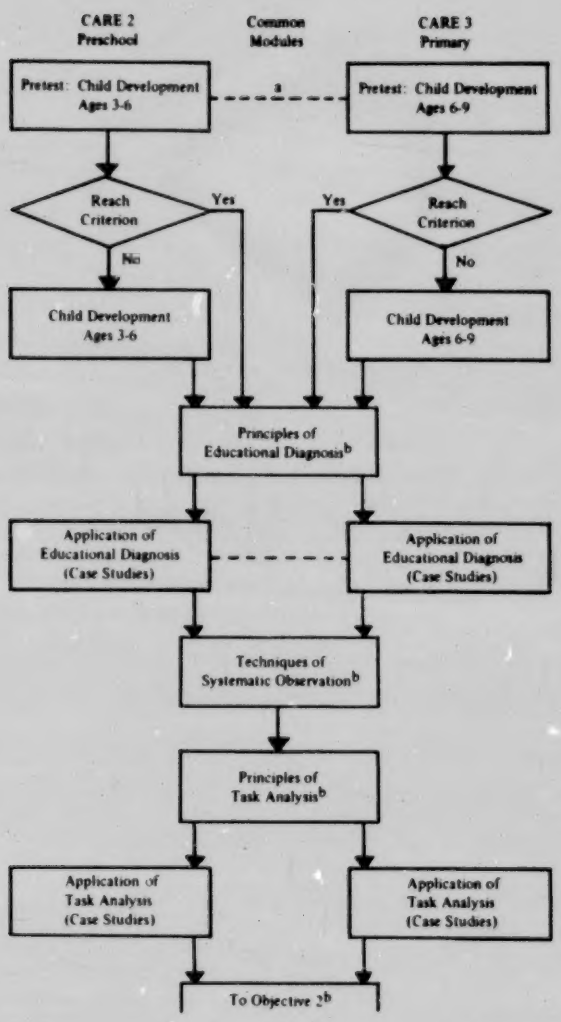
Students who complete CARE 4 are expected to:

a. Identify educationally relevant characteristics of visually handicapped children;

b. Construct instructional objectives for these children;

c. Select suitable media and materials for instruction;

d. Arrange proper classroom environmental conditions;




[a] Dashed line indicates that the same format is used for both courses; teaching strategy (and programming) are the same, but content differs.

[b] Basic content and strategies are the same for both.

Fig. 3. Relationship Between CARE 2 and CARE 3 Modules

e. Design instructional procedu[illegible] facilitate learning;
f. Utilize appropriate techniques for evaluating performance.

The students interact with the instructional program at computer student stations (fig. 4). In addition to the program of instruction stored in the computer, each student has and uses a textbook, a handbook, a set of materials for testing young children, and other appropriate teaching

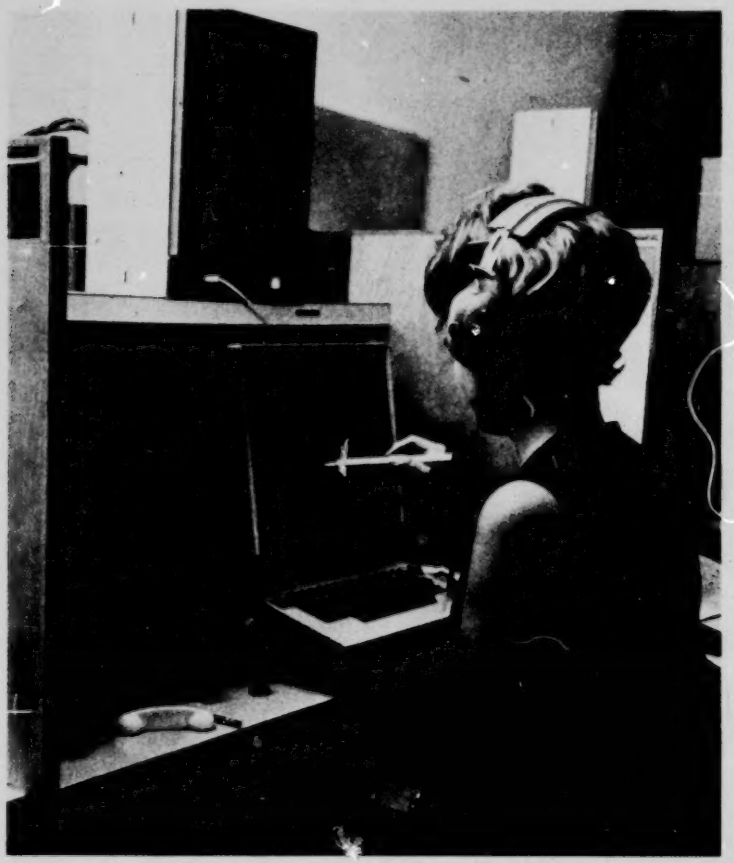


Fig. 4. Student at the Computer-Assisted Instruction Student Station.

tools. When the teacher-student completes this course, he takes a 75-item final examination generated by the computer from a pool of more than 300 test questions covering the objectives of the course. A complete record of each participant's performance, not only on the test but on the course as well, is recorded on magnetic computer tape for summarization, marking, and course improvement by the authors. Teacher-students are awarded marks by the faculty member in charge of the course, and they receive graduate level college credit appropriate to the amount of curriculum included in the program.

Fig. 5. Exterior View of Expanded Mobile CAI Laboratory Ready for Instruction

## Facilities

To implement this program a custom-built expandable van (fig. 5) was fitted with a small, stand-alone computer and fifteen student stations (IBM 1500 Instructional System). Each student station is equipped with a small cathode ray tube (CRT) on which is displayed alphameric information plus a wide variety of graphics, including animated illustrations. Student response components of the CRT include a typewriterlike key-

board with upper and lower case characters, plus a variety of special characters and a light-sensitive pen used by the learner in making responses to displayed material. In addition to the CRT, each student station has a rear screen image projector on which are displayed both black and white and color photographic images. A 1,000-frame reel of microfilm, with each frame separately addressable by the computer, is used in the image projector. The third major display component is an audio device with separately addressable prerecorded messages played through a headset for each individual student.

### Implementation

On a prearranged schedule, the Mobile CAI laboratory is moved to a school in a rural community and connected to electric, telephone, and water services. Over the next seven weeks, in late afternoon and evening hours, elementary teachers and their supervisors schedule themselves for one- to three-hour sessions at computer student stations on flexible and irregular schedules to fit into the demands of their personal lives. During a seven-week period the Mobile CAI Laboratory accommodates approximately 125 to 150 learners who enroll for a typical three-credit college level course. The students, of course, put in considerable time in home study of the textbook and the 400 page handbook that accompany the course. The Mobile Laboratory and this utilization plan are sufficient for providing instruction to more than 1,000 educators during a calendar year. The existing computer has sufficient power and capacity to support 15 additional student stations, which would double the number of students served. Currently, the existing student stations and relocation scheduled every seven weeks meet the needs of the target audience in a 25 mile radius.

The field staff for the program consists of a manager who travels with the mobile laboratory plus a computer operator and two student proctors hired in the local community to help students with scheduling and student station operations. The faculty member in charge of the course is available from time to time to talk with students in person and can always be reached by a telephone located in the mobile laboratory.

### Curriculum/Student Evaluation

During the Winter Term 1971, a summary evaluation of the CARE 1 program was made. All students who were enrolled in EEC 400, "Introduction to the Education of Exceptional Children," were randomly

assigned to either of two conditions–Computer-Assisted Instruction (CAI) or Conventional Instruction (CI). The CAI group (n= 27) received all instruction by means of the IBN 1500 Instructional System and did not attend classes with the CI group. The CI group (n= 87) received the conventional lecture-discussion method of instruction and met three days per week in 75-minute sessions for ten weeks.

All students, CAI and CI, were enrolled as regular students for three credits of undergraduate or graduate credit. Both the CAI and the CI courses were designed to reach the same objectives. The instructor of the CI group was an author of the CAI course and helped plan the structure and the objectives of the CAI course.

The dependent variables in this investigation were time and final examination scores based on 75 items. Results are shown in Table 1.

Table 1. Comparison of Final Examination Scores and Instructional Time for CAI and CI Students

| | *Final Examination Scores* | | | *Time in Hours*** |
|---|---|---|---|---|
| | $\bar{X}$ | S.D. | T | |
| Computer assisted instruction | 65.69 | 4.68 | | 25.21 |
| Conventional instruction | 52.78 | 5.89 | 11.65* | 37.50 |

* This difference is statistically significant with $p < .001$.

** CAI time is mean time per student and the time for conventional instruction is the total hours scheduled in lecture session for all students.

These data indicate that the group of students instructed by CAI obtained a mean score 24% higher on the final examination than did those students instructed in the conventional manner. Furthermore, the CAI students completed the three-credit course in 12 hours less time (33%) than the conventionally instructed students.

### Alternative Problem Solutions

There are other solutions to the problem of providing in-service training for teachers in sparsely populated areas that, at first glance, might appear to be superior or less expensive. A brief examination of these alternatives might prove fruitful. One alternative would be the "traditional approach" to continuing education, i.e., sending faculty members into the field to teach courses in communities remote from the main university campus. This procedure, although relatively inexpensive, suf-

fers from several disadvantages—an insufficient number of adequately trained professors who are willing to travel great distances to provide instruction, widely variable quality of instruction, widely variable course content, and rigid scheduling for the students. A second alternative is to provide intensive institutes and workshops at the university campus for selected attendees. Although this procedure usually provides a higher quality of instruction than does off-campus instruction, it suffers from other disadvantages.

Table 2 summarizes and compares twelve institutes on the campus of The Pennsylvania State University during parts of fiscal years 1967 through 1972 and two mobile CAI projects during parts of fiscal years 1969, 1971, and 1972. The institutes were sponsored by either the U.S. Office of Education or the National Science Foundation and provided the costs of instruction, stipends, and dependency allowances. The mobile CAI projects were sponsored by the U.S. Office of Education and provided the costs of instruction (computer rental), relocation of mobile facilities, operating staff costs, instructional materials, and curriculum maintenance and revision.

Table 2. Comparison of Costs, Number of Students, Student Credit Hours Produced, Average Cost per Student Credit Hour for Traditional Institutes and Mobile CAI

| | *Traditional Institutes* | *Mobile CAI* | *Total* |
|---|---|---|---|
| Total costs | $534,310 | $577,444 | $1,111,754 |
| Total number of students | 416 | 1,869 | 2,285 |
| Total student credit hours produced | 2,706 | 5,220 | 7,926 |
| Total average cost per student | 1,284 | 309 | 796 |
| Total average cost per student credit hour | 197 | 111 | 154 |

The institutes cost a total of $534,310, included 416 students and produced 2,706 student credit hours (average of 6.5 credit hours per student) for a total average cost per student of $1,284, and a total average cost per student credit hour of $197. The mobile CAI programs cost a total of $577,444, included 1,869 students, produced 5,220 student credit hours (average of 2.79 credit hours per student) at a total average cost per student of $309, and a total average cost per student credit hour of $111. Stated another way, the mobile CAI programs re-

quired only 52% of the total funds provided for these two kinds of programs, yet enrolled 82% of the total number of students and produced 66% of the student credit hours provided by both types of programs combined. The average cost per student in the mobile CAI programs was only 24% of the average cost per student in the traditional institute and only 56% of the average cost per student credit hour in the traditional institute.

It could be argued, of course, that the CAI renewal programs would not be possible without considerable expense in curriculum development, which is obviously true. It is not appropriate to include these curriculum development costs in a cost-comparison if similar costs are excluded from the total for traditional institutes. The curriculum development costs that occur in a traditional institute are in the form of the undergraduate, graduate, and postgraduate training that the faculty members conducting the institute supply. Their salaries could be considered only the "operational costs" of implementing the curriculum the same as computer

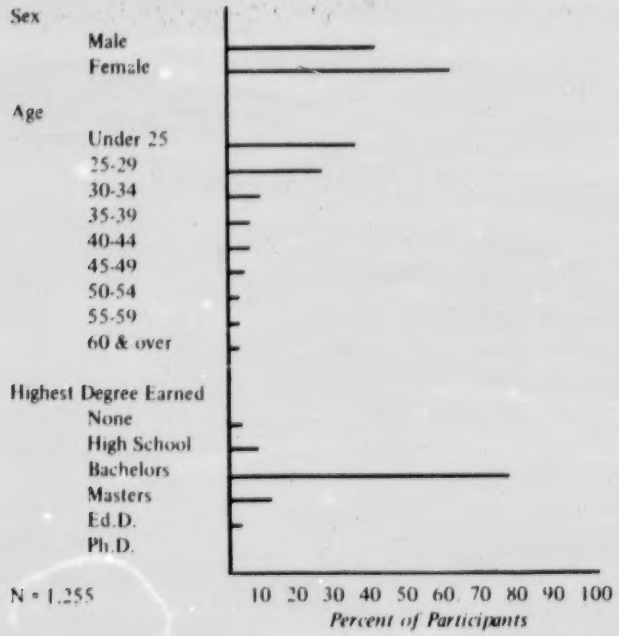



Fig. 6. Distribution in percentage of 1,255 participants in the most recent mobile CAI project by sex, age, and highest degree earned.

rental and other expenses are the "operational costs" of providing a computer-assisted renewal education program.

Perhaps of more importance than the total dollars involved or the

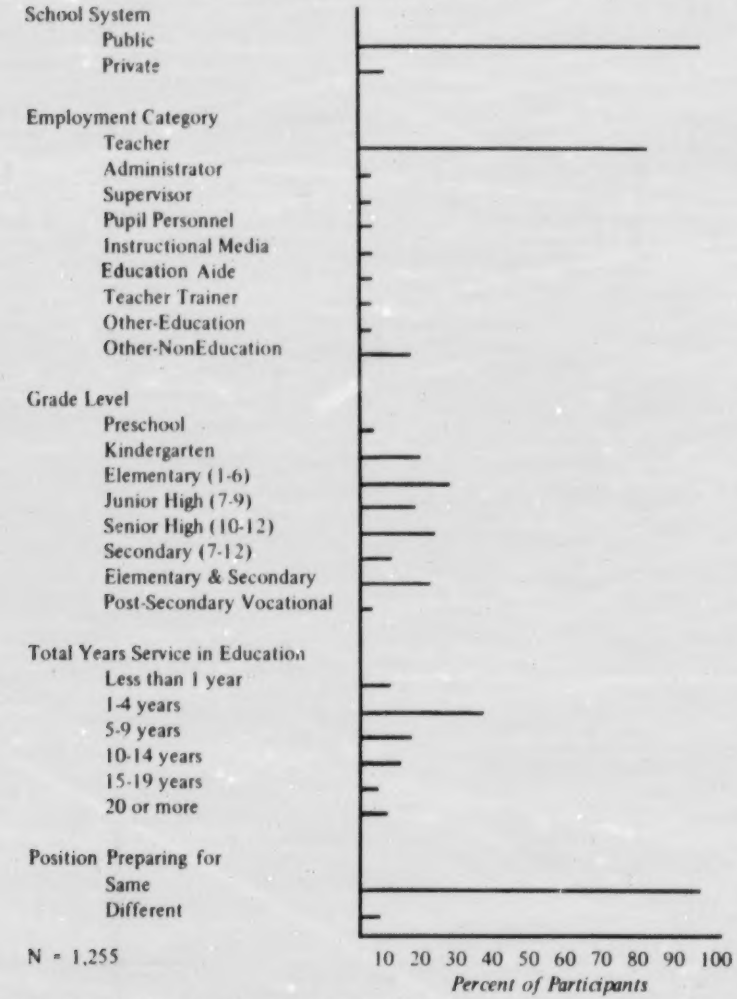



Fig. 7. Distribution in percentage of 1,255 participants in the most recent mobile CAI projects by employment category, type of employing school system, position being prepared for, grade level taught, and total years service in education.

costs per student credit hour is the comparative impact of these two methods of providing in-service education. The CAI projects provided instruction for 1,869 participants whereas the on-campus institutes provided an educational experience for 416 participants. Further, the characteristics of these participants is quite different. The on-campus institutes are quite commonly very selective and provide education to only those who meet certain selection criteria and who are able to leave their home community for a period of time so that they can reside at the university campus for the duration of the institute. The CAI programs, on the other hand, have been available on an open admissions basis within an average of 25 miles of each participant's home. The typical participant (fig. 6) in the most recent mobile CAI project is female (62%), less than 30 years old (59%), and holds a bachelor's degree as her highest degree earned (74%). She is employed (fig. 7) by a public school system (95%) as a teacher (76%) in grades K-6 (45%). She has between one and four years service in education (54%) and is taking the course to improve her skills as a teacher (86%) rather than seeking a change to a

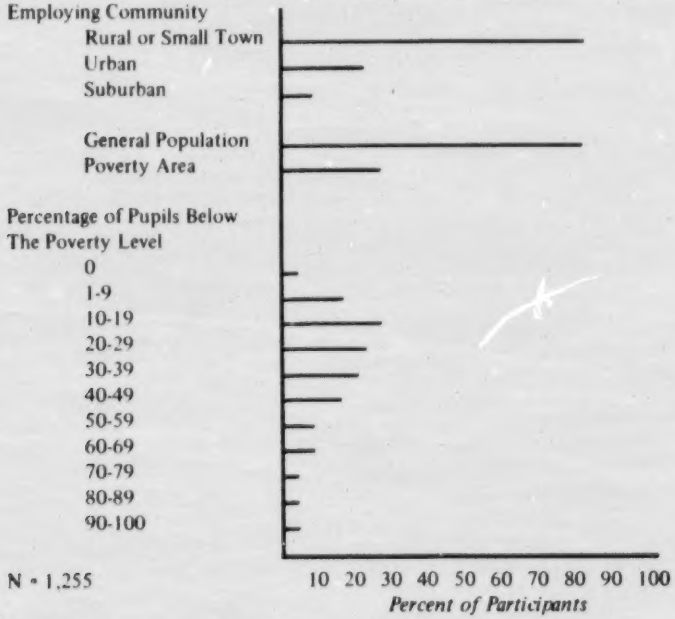



Fig. 8. Distribution in percentage of 1,255 participants in the most recent mobile CAI projects by employing community and poverty level of pupils.

different job. Her school (fig. 8) is in a rural community or small town (78%), and she is teaching the general population (80%) as opposed to teaching pupils in a poverty area, although she and 62% of her colleagues teach in a community where from 10% to 40% of the pupils are from homes with incomes below the federally established poverty level. The typical teacher described here is probably also a housewife with family responsibilities and unable to leave her community for extended study at the university. Taking a high quality, flexible program to her home community is perhaps the only way to upgrade her teaching skills in the classroom.

**Student Benefits**

Educators who have taken the course report a high degree of satisfaction with the curriculum and with the method of instruction. Measured average increases in subject matter achievement on the part of participants have been substantial. Students taught through CAI have also realized a considerable savings in time when compared with students instructed in the conventional manner. The major advantage of this program is that it brings an individually adaptive, quality course of instruction on a timely subject to groups of educational practitioners who would not otherwise get the benefit of retraining and upgrading. As a by-product, experience in the Mobile Computer Assisted Instruction Laboratory will make teachers more aware of technological advances in education than they presently are. This experience should help to dispel some of the mystery about and fear of computers that many people possess.

# TRAINING REGULAR CLASSROOM TEACHERS TO PROVIDE SPECIAL EDUCATION SERVICES: THE CONSULTING TEACHER PROGRAM

PHYLLIS F. PERELMAN
*Instructor and Consulting Teacher*
*Special Education Program*
*University of Vermont*
*and*
WAYNE L. FOX
*Associate Professor, Special Education Program*
*University of Vermont*

There are an estimated 9,000 to 10,000 children in Vermont who are eligible to receive special education services (McKenzie, 1970). These eligible youngsters are found throughout Vermont in cities, villages, towns, and remote rural areas. Vermont is a small, sparsely populated, primarily rural state with few urban centers. Burlington, the largest city, has a population of less than 40,000. Vermont has no large urban ghettos; however, there are small urban ghettos and, in addition to the problems found in the cities, there are the problems associated with rural poverty, rural isolation, and rural schools.

The nature of the state tends to mitigate against a special class approach for providing special education services for all of Vermont's eligible children. In many sparsely populated sections of Vermont there is not a large enough concentration of eligible children to permit special classrooms. This means that children must be drawn from a wide area and transported to special classroom facilities. There are many children in Vermont who spend literally hours each day traveling to and from their special classes. This is not only a hardship on the child but represents a significant expense that must be deducted from the educational dollar.

The costs of special education in Vermont are at an all-time high. Approximately 2,400 children are currently receiving services in special education classes throughout the state. It is estimated that there are an additional 6,600 to 7,600 eligible children who are not in special classes. The costs of providing services to these children through the special class approach is prohibitive. New classrooms must be constructed, additional transportation provided, and special classroom teachers trained before all

of Vermont's eligible children can be served. In addition to these obvious drawbacks to the special class approach, Vermonters do not want their children discriminated against. Recently passed legislation assures that every Vermont child has the right to a quality education. The State Board of Education has approved, in light of this legislation, a ten-year plan for special education which will assure by 1983 that all Vermont children will receive a quality education and that most children will be integrated into regular public schools. Local Vermont school districts, the State Department of Education, and the Consulting Teacher Program at the University of Vermont have joined in a cooperative effort to achieve these goals.

The consulting teacher approach to special education is an attractive alternative to special classes for providing special education services to many eligible children (McKenzie, 1972; Fox, Egner, Paolucci, Perelman, McKenzie, and Garvin, 1973). Consulting teachers provide special educational services to eligible children within regular classrooms through the training of classroom teachers, school administrators, and the parents of eligible children. The eligible child is typically not removed from his classroom for special services but receives these services from his own classroom teacher with assistance from a consulting teacher. The consulting teacher approach to special education is a training-based approach in that it provides training to regular classroom teachers so that they can provide special services within their classrooms (Lilly, 1971; Deno, 1970). Consulting teachers are employed by the local school district and receive appointments as associate faculty of the Special Education Program at the University of Vermont.

### The Consulting Teacher Special Education Behavioral Model

Training provided classroom teachers is based upon the consulting teacher special education behavioral model for serving eligible children within regular classrooms. After a child has been referred by his classroom teacher for a deficit in language, arithmetic, or social behaviors, and after he has been determined eligible for consulting teacher services, his entry level behaviors are measured. (Special Education Program Staff. *Dimensions of the Population Served by the Consulting Teacher Program, with Data Indicating that these Dimensions Pertain to a Large Majority of Children Served by the Program.* Burlington, Vermont: Special Education Program, College of Education, 1971.) A child's entry level for a particular curriculum area is a measure of his mastery of skills and knowledge in that area at the time of referral. The entry level represents

the sum total of all behaviors in the child's repertoire that are relevant to the identified target deficit behaviors. Entry level measurement provides information that allows the teacher to determine where the eligible child is in the education process.

After a child's entry level has been determined, the next step is to specify an instructional objective which describes where he should be in the learning process. The instructional objective includes a description of behavior that can be reliably observed by at least two independent observers, a statement of the conditions under which the behavior is to be observed, and a statement of the criteria for acceptable performance (Wheeler and Fox, 1972).

Teaching/learning procedures are then developed and implemented so that the child may move from his entry level performance to the performance level specified in the instructional objective. In the consulting teacher special education behavioral model, teaching/learning procedures involve four basic learning principles derived from the experimental analysis of behavior: reinforcement, scheduling of reinforcement, behavioral shaping, and the effects of antecedent stimuli.

The final step in the model involves an evaluation of teaching/learning procedures and the child's progress toward the attainment of the specified instructional objectives. The progress of the child is measured regularly and continuously, usually on a daily basis. Measures of the child's progress are compared to his entry level performance, which permits an evaluation of the teaching/learning procedures. Procedures are judged effective if the child is shown to be making adequate progress toward instructional objectives. If it is determined that a child is not making adequate progress, then the procedures undergo modification until they are demonstrated effective. During the past six years the consulting teacher special education behavioral model has been demonstrated effective for providing special educational services to more than 1,000 eligible children in Vermont regular classrooms (see the various yearly reports of the Consulting Teacher Program, e.g., McKenzie, 1970; Cleveland, Humphreys, Schneider and Fox, 1971; Hanley and Perelman, 1971; Egner, Paolucci, Perelman, Fox and McKenzie, 1972).

### Training Classroom Teachers

Consulting teachers provide three levels of training for classroom teachers learning to apply the special education behavioral model within the school district. Classroom teachers learn the skills required to deliver special education services through consultation, workshops, and formal

coursework for graduate credit (Christie, McKenzie and Burdett, 1972). Training through consultation begins when a teacher refers a child for special education services. Through direct, on-the-job training, the teacher learns how to apply the special education behavioral model. The teacher is trained to reliably define and measure the behavior of concern, to determine the referred child's entry level behavior, to specify an instructional objective, and to implement and evaluate teaching/learning procedures. The consulting teacher assumes a direct role in developing the instructional program for the child during consultation.

Workshops within the school district provide more formal training in application of the consulting teacher special education behavioral model. Classroom teachers complete instructional units that emphasize observation and measurement of classroom behaviors and the implementation of the special education model. Satisfactory completion of the workshop requires that the classroom teacher apply the special education behavioral model to at least one eligible child in his classroom. Teachers are asked to complete introductory readings on applied behavioral analysis and the rationale for the consulting teacher approach to special education. The workshop culminates in an oral presentation by each teacher in which he presents his individualized instructional programs to his colleagues and to the parents of the eligible children.

Consulting teachers, as associate faculty, are authorized by the Special Education Program to offer up to 12 credit hours of university coursework to classroom teachers within their school districts. Coursework is divided into self-paced instructional units that include specified instructional objectives, suggested references, suggested activites, and practicum experiences (Fox, 1972). A clear understanding of the principles of behavioral analysis and individualizing instruction is emphasized throughout all formal coursework. Classroom teachers learn to derive, specify, and sequence terminal instructional objectives that are expected of all children. They learn to assess each child's progress and to apply effective teaching/learning procedures in this classrooms. Evaluation of their teaching/learning procedures are interpreted to parents, colleagues, and school administrators.

### Training Consulting Teachers

Each year certified and experienced teachers are recruited and selected to begin the two-year (plus one summer) academic Master of Education program to become consulting teachers. Candidates are chosen on the basis of several criteria, including at least two years as a successful

classroom teacher, leadership among peers, ability to work well with others, probability of academic success, and desire to help educate children of Vermon who are eligible for special education. In addition, mobility in relocating in one of Vermont's 54 superintendencies and the probability of remaining in Vermont are critical factors. An analysis of tasks performed by school district consulting teachers gave direction to the development of four categories of instructional modules that form the basis for the training program for consulting teachers.

The graduate program begins in the summer with coursework in behavior theory and individualizing instruction, including practicum experience in a laboratory classroom. During the summer the consulting teacher-in-training provides direct special education services to at least one child in the developmental laboratory classroom.

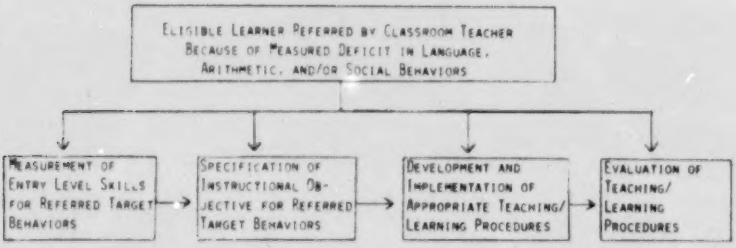
During the first year, consulting teachers-in-training broaden their skills and knowledge, through coursework and practica, in the application of individualized instruction, behavior theory, and research applications for classroom use. Numerous opportunities are provided for consultation and training of school personnel and parents of eligible children. During the first full academic year of training, consulting teachers-in-training provide services to nine eligible children through consultation or direct contact with the child in his classroom.

In the second year of training, students serve a closely supervised internship in a Vermont school district during which they consult with school personnel and parents to develop effective programs for managing and educating at least 20 eligible children. They also train school personnel through workshops and courses and participate in seminars at the university. The internship represents a cooperative venture since partial funding of the local Consulting Teacher Program is provided by the school district, as well as a future commitment on the part of the administration.

Upon successful completion of the internship year, students receive a Master of Education degree and present their credentials to a board of certified consulting teachers to obtain state certification as a consulting teacher. The consulting teacher is then employed by the school district where he has served as an intern during the second year of training. The new state legislation reinforces cooperation between the school district and the State Department of Education since 75% of the salary of the consulting teacher and his aide may be requested from the state under the implementation of the ten-year plan to provide education for every eligible child in Vermont.

## Current Status

Approximately 400 eligible children are receiving special educational services within regular classrooms this year through the efforts of consulting teachers throughout Vermont. Consulting teachers may be found in eleven of Vermont's 54 superintendencies. This is especially significant since the first consulting teacher was certified only two years ago. There are two positions in Vermont for every consulting teacher presently in training. Superintendents and other key school district administrators have indicated their acceptance of this departure from traditional special education by their continuing support of the program. As long as consulting teachers continue to provide effective special education services to eligible children within regular classrooms, the approach will continue to be an attractive alternative to special classes.


Eligible Learner Referred by Classroom Teacher Because of Measured Deficit in Language, Arithmetic, and/or Social Behaviors
Measurement of Entry Level Skills for Referred Target Behaviors
Specification of Instructional Objective for Referred Target Behaviors
Development and Implementation of Appropriate Teaching/Learning Procedures
Evaluation of Teaching/Learning Procedures

## References


Christie, L. S., McKenzie, H. S., and Burdett, C. S. The consulting teacher approach to special education. In-service training for regular classroom teachers. *Focus on Exceptional Children*, 1972.

Cleveland, M. D., Humphreys, S., Schneider, B. M. and Fox, W. L. *The 1969-1970 Yearly Report of the Consulting Teacher Program; Chittenden Central School District.* Burlington, Vermont: Special Education Program, College of Education, University of Vermont, 1971.

Deno, E. Special Education as developmental capital. *Exceptional Children*, 1970, 37, 229-237.

Egner, A. N., Paolucci, P. W., Perelman, P. F., Fox, W. L. and McKenzie, H. S. *The 1970-1971 Yearly Report of the Consulting Teacher Program: EPDA, Chittenden Central School District.* Burlington, Vermont: Special Education Program, College of Education, University of Vermont, 1972.

Fox, W. L. The Consulting teacher program. Unpublished manuscript. Special Education Program, College of Education, University of Vermont, 1972.

Fox, W. L., Egner, A. N., Paolucci, P. E., Perelman, P. F., Garvin, J. S., and

McKenzie, H. S. An introduction to a regular classroom approach to special education. In E. Deno (Ed.) *Instructional Alternatives for Exceptional Children.*

Hanley, E. M. and Perelman, P. F. *The 1969-1970 Yearly Report of the Consulting Teacher Program: Winooski School District.* Burlington, Vermont: Special Education Program, College of Education, University of Vermont, 1971.

Lilly, M. S. A training based model for special education. *Exceptional Children,* 1971, 37, 745-749.

McKenzie, H. S. (Ed.) *The 1968-1969 Yearly Report of the Consulting Teacher Program, Vol. I* and *Vol. II.* Burlington, Vermont: Special Education Program, College of Education, University of Vermont 1970(b).

McKenzie, H. S. Special education and consulting teachers. In F. Clark, D. Evans, and L. Hammerlynk (Eds.). *Implementing Behavioral Programs for Schools and Clinics.* Champaign, Illinois: Research Press, 1972, 103-125.

Wheeler, A. N. and Fox, W. L. *Managing behavior: Part 5: Behavior modifications: A teacher's guide to writing instructional objectives.* Lawrence, Kansas: H. & H. Enterprises, Inc., 1972.

# CLINICAL TEACHER MODEL FOR INTERRELATED AREAS OF SPECIAL EDUCATION

LOUIS SCHWARTZ
*Professor and Coordinator, Interrelated Areas of Special Education*
*Florida State University*
*and*
ANDREW OSEROFF
*Assistant Professor of*
*Interrelated Areas of Special Education*
*Florida State University*

## Goals and Objectives

The establishment and evaluation of a Clinical Teacher Model for Interrelated Areas of Special Education is supported by the Bureau of Education for the Handicapped, U.S. Office of Education, as a Special Projects, Prototype, under provisions of P.L. 91-230. The outcome of the research and development activity is a new and viable noncategorical training program for the preparation of personnel in the education of exceptional children (Proceedings, 1972). The model offers a performance based, criterion referenced, multimedia, computer managed, and individualized instructional system. Generic teacher competencies of observation, diagnosis, intervention, and evaluation are required in terms of producing common desired academic and social behaviors in mildly handicapped children with varying exceptionalities, such as, "educable retarded," "learning disabilities," and "emotionally disturbed."

Linking the heritage of the field (Schwartz, 1967) with the potential of contemporary instructional systems and technology (Deno, 1970; Haring, 1970) provides the opportunity for building a data base for proposed changes in teacher education (Tyler, 1969). The actual alliance of Special Education, School Psychology, Elementary Education, Computer Assisted Instruction, Instructional Television and Media, and Educational Research and Testing at the Florida State University is one of the highlights of the project. Behaviorally specified and measurable performance outcomes for both the clinical teacher and the exceptional children to be served are explicitly defined within the individualized instructional system. Focusing on educationally desired pupil behaviors, rather than existing medical and psychological categories, the program offers competency-based instructional modules. This instructional pack-

age is designed to enable the clinical teacher trainee to achieve competencies necessary for producing academic and social gains in exceptional children. The special educator prepared with these competencies is referred to as a clinical teacher.

Initial concepts of the model were developed during the 1969-70 year (Dodl, 1970; Schwartz, 1971) under provisions of a Program Development Grant (P.L. 85-926, as amended). Design of the prototype, individualized instructional modules, computer management system, and evaluation strategies by the interdisciplinary project staff marked the first implementation year 1970-71. Currently eleven seniors, twelve juniors, and several graduate research assistants constitute the try-out population of the project. One additional junior group will enter the revised modules in 1972-73 and complete the formative evaluation phase by 1974-75. Summative evaluation and documentation of the model's effectiveness is the ultimate product of the project.

## Forecast

Mildly handicapped children with individual behavioral needs require a short-term specialized learning resource room. The clinical teacher systematically observes, diagnoses, and transmits an educational profile containing pupil entry behaviors and desired behavioral objectives via a desk teletype terminal to a regional modulation center for analysis, prescription, and retrieval (Adamson and Van Etten, 1970). Within minutes, a computer printout is returned containing instructional objectives, requisite subordinate skills, criterion measures, multimedia resources and options field tested and matched for prescribed student performance.

The clinical teacher designs and manages the intervention strategy utilizing the packaged, programmed module with the individual student. The learner is provided appropriate instructional options and ongoing assessment. Both student and teacher chart progress towards desired outcomes. Product assessment, therefore, is the ultimate criterion measure of the efficacy of the individualized and personalized instructional system. Feedback to the modulation center modifies any of the components, and improves subsequent instructional packages, while building the data base for evaluation of instruction.

The computer managed instructional system provides the student and teacher with an ongoing record of performance in terms of clearly defined and measurable academic and social behaviors. Returning to the mainstream of regular class membership, the individual child performs the behavior necessary for succeeding with his peers and may only occa-

sionally require prescribed assistance from the clinical teacher in the learning resource room.

The forecast when fully operational will fulfill the promises of the "brave new world" for special education. "It includes a compulsion on the part of instructional specialist to delineate clearly and meticulously the pedagogical steps and stages by which the learner is to achieve desired terminal behaviors" (Blackman, 1964, pp. 29-30).

## Approach

The desired behaviors of children with varying exceptionalities and the necessary competencies required of the clinical teacher to produce these gains are intimately and inextricably interrelated within the performance-based teacher education curriculum (Elam, 1971). A conceptual model is presented in Figure 1, the instructional system displayed

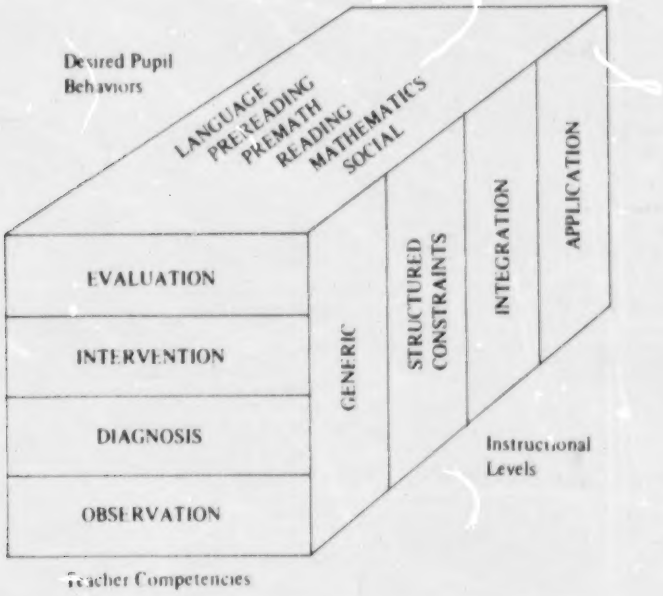



Fig. 1. Conceptual Model

in Figure 2. Instructional modules provide the organizational unit or

series of learning experiences designed to enable the trainee to demonstrate competency for a specific objective and is monitored by a computer management system. The instructional levels representing

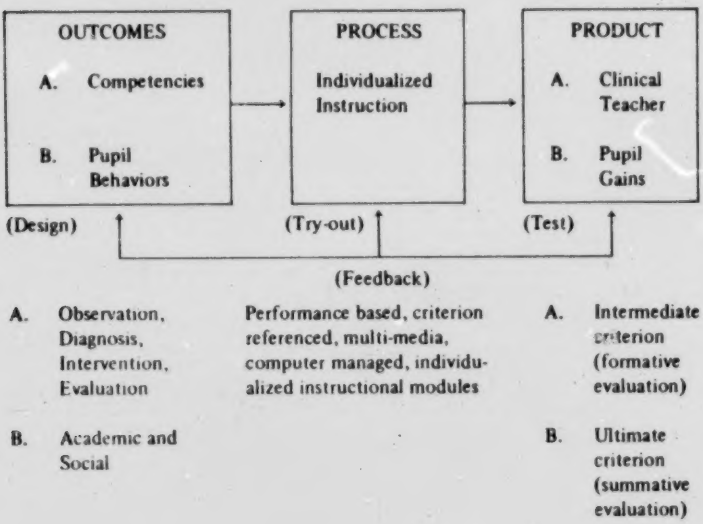



Fig. 2. Instructional System

varying degrees of simulation are generic, structured constraints, integration, and application. Major competencies on the generic level are cognitive, i.e., orientation to the emerging concepts, systems, and technology of special education. The clinical teacher trainee demonstrates his competencies in observation, diagnosis, intervention, and evaluation at several levels of simulated environments. The structured constraint level provides the trainee with opportunity to perform in a local public school resource room with close supervision from both the cooperating teacher and the clinical professor. Integration refers to the stage of preparation during which the trainee combines his competencies, producing gains in mildly handicapped children under performance contracts and less supervision. Graduate internship (application) affords documentation of the clinical teacher competencies and their effect on exceptional children.

## References


Adamson, G. and Van Etten, C. Prescribing via analysis and retrieval of instructional materials in the educational modulation center, *Exceptional Children*, March, 1970.

Blackman, L. S. Research in special education, *Johnstone Bulletin*, 1964, 7, 23-32.

Deno, E. Special education as developmental capital, *Exceptional Children*, November, 1970.

Dodl, N. R. A feasibility study of the Florida State University model for the preparation of elementary school teachers, Final Report: Grant No. OEG-0-9-190504-4401 (010), Washington, D.C.: Sup't. of Documents, U.S. Gov't. Printing Office, January, 1970.

Elam, S. Performance-based teacher education: what is the state of the art? *AACTE Bulletin*, Vol. XXIV, No. 9, Dec., 1971.

Haring, N. G. The new curriculum design in special education, *Educational Technology*, May, 1970.

*Proceedings:* Innovative non-categorical interrelated projects in the education of the handicapped. A collaborative effort by L. Schwartz, A. Oseroff, H. Drucker, and R. Schwartz. Tallahassee, Fla.: The Florida State University, January, 1972.

Schwartz, L. Preparation of the clinical teacher for special education: 1866-1966, *Exceptional Children*, October, 1967.

Schwartz, L. A clinical teacher model for interrelated areas of special education, *Exceptional Children*, April, 1971.

Tyler, R. W. Editor. *Educational Evaluation: new roles, new means.* The Sixty-Eighth Yearbook of the National Society for the Study of Education, Part II. Chicago, Ill.: The University of Chicago Press, 1969.

# PROGRAMMED ENVIRONMENTS FOR THE DEVELOPMENTALLY RETARDED

JAMES W. TAWNEY
*Project Director, Programmed Environments Project*
*University of Kentucky*

## Introduction

This project is aimed at a multidimensional problem related to the training of retarded children. Two dimensions are the lack of appropriate curricula for public school classes for the "trainable retarded" and the lack of manpower and training models to meet an anticipated demand for educational services for preschool and school age "severely retarded/multiply handicapped" children who are presently excluded from public education because of age, I.Q. score, or disruptive social behavior. A third dimension represents a more basic problem – the misapplication of inadequate teaching strategies to new populations who demand equal educational opportunities. Here, misapplication refers to the procedure whereby a curriculum, found to be unsatisfactory for one group of children, is modified and instituted in classes for another group. One example is the misapplication of the regular curriculum to classes for the educable retarded. This was not notably successful, based on numerous efficacy studies (Guskin and Spicker, 1968; Kirk, 1964). This procedure repeated itself when it became apparent that classes for the educable retarded did not meet the needs of all retarded children. When parents of the trainable retarded, who were excluded from these classes, demanded equal educational opportunity for their children, educators reluctantly (Goldberg and Cruickshank, 1958) complied. Curricula for the educable retarded were modified for classes for the "trainable retarded." Again, the effectiveness of these classes was not demonstrated (Cain and Levine, 1963; Guskin and Spicker, 1968; Kirk, 1964).

Now special education is faced with a new demand for publicly supported education for all handicapped persons, regardless of age or severity of handicap (NARC, 1971). This demand presents a third occasion to misapply a modified, ineffective curriculum to a new population. Another replication of this procedure would be unfortunate in view of the intensive educational programming which appears to be necessary to shape or build the behavioral repertoire of children with low functional levels. The probability is high that this misapplication might occur when

other dimensions of the major problem are considered. These dimensions include the lack of:

1. Adequately trained teachers of the "trainable retarded" (Cain and Levine, 1963).
2. Adequate teacher training programs for the "trainable retarded" (Cain and Levine, 1963).
3. Adequate training models to meet manpower needs in special education by the year 2000 (Gallagher, 1970).
4. Information on the learning characteristics of young children assumed to be severely retarded/multiply handicapped.
5. Estimates of the incidence of young children assumed to be severely retarded/multiply handicapped who might receive educational services in states which serve *all* children from 0-21 years of age.

An analysis of the dimensions of a complex, multidimensional problem leads to the conclusion that an array of intervention strategies is called for; to provide curricula and training models for children who are not presently being served by public education, or who are being served, but with inadequate curricula.

## Statement of Purpose

The major purpose of this project is to interrupt the process of misapplication of inadequate teaching strategies to populations of young children assumed to be developmentally retarded with a coordinated program of activities to:

a. develop a programmed environment preschool model for "severely retarded" children.
b. test a teacher training/retraining model and simultaneously disseminate and field test a recently developed language curriculum for the young "trainable" child.
c. conduct supportive survey research activities.
d. develop competency based modules of instruction for preschool staff training.

## Project Objectives

The specific objectives of this project are:

1. To develop a programmed environment model for the preschool

education of children assumed to be severely retarded/multiply handicapped.

2. To develop the Teacher Tutor model through the dissemination of Systematic Language Instruction.

3. To list national research and curriculum development activities that relate to preschool children assumed to be severely retarded/multiply handicapped and to curriculum efforts for the young "trainable" retarded child.

4. To develop competency based instructional modules for training/retraining staff for Programmed Environment Preschools for individuals assumed to be severely retarded.

## Program Description

*Objective 1.0. To develop a programmed environment model for the preschool education of children assumed to be severely retarded/multiply handicapped*

*Rationale*

There is an urgent need to develop program models for the education of young children assumed to be severely developmentally retarded. These models should be derived from a sound theoretical base and an analysis of the learning environment. The programmed environment preschool model is based on the assumption that a totally programmed environment is requisite to effective and efficient learning experiences for the child whose functional level is assumed to be severely retarded by environmental events. Concepts which underlie an errorless learning technology form the theoretical base for the program. The implementation of this model will provide curricula, statements of teacher competencies, and strategies for generalizing components of the model into other settings.

*Strategies*

In cooperation with the local Association for Retarded Children, an experimental preschool for young "severely retarded" children has been established on the campus of the University of Kentucky. Eight children receive instruction in a programmed environment. Children receive part of their instruction in an operant teaching booth, where visual and auditory stimuli are presented under highly controlled conditions. They receive instruction from adults, who develop and execute extensively programmed learning activities. Project staff collect data on all aspects of the

environment. These data will be utilized to determine future direction of the program, to develop "curricula" for use in preschool programs and to specify necessary behaviors for adults who work with similar children in preschool environments.

*Status*

This component of the project is in the implementation stage. Apparatus-controlled programs are being written for the establishment of specific behaviors. A large number of programs have been written to shape specific behaviors in adult-child interactions. A preliminary analysis of an existing "representative" day care setting has been completed, and submitted for publication in a professional journal. An hypothesized "curriculum" for "severely retarded" children is being developed. Finally, teacher behaviors (competencies) are being specified, as the basis for the development of competency based modules of instruction, as described in objective 4.0.

*Dissemination activities and materials*

1. Professionals concerned with the education of the young "severely retarded" child are encouraged to visit the programmed environment preschool for an extensive period. Strategies will be implemented to provide short term training sessions for personnel. These experiences are likely to be most helpful to:

(a) state legislators–who will be responsible for providing funds and services to the "severely retarded";

(b) administrators of special education in urban settings–who will be responsible for planning educational services for children who constitute a "new population" for them;

(c) college and university personnel–who may be responsible for specifying teacher competencies and training functions within their state;

(d) personnel who are establishing new preschool programs or are revising existing programs for young "severely retarded" children–who will be responsible for programming for children on a daily basis.

2. "Curricula" for the "severely retarded" child.

Specific curricula "products" will be developed during the course of this project. However, these materials will not be available immediately.

3. Results of research.

Pilot data are being collected during the implementation phase of the

project. Research reports eminating from the preschool will be available, on or about June 1, 1974.

4. Specification of teacher competencies.

These products are discussed under objective 4.0.

*Objective 2.0. To develop the Teacher Tutor model through the dissemination of Systematic Language Instruction*

*Rationale*

Teacher training activities for the teacher of the "trainable retarded" child appear to have developed from the misapplication of existing curricula for the "EMR" child rather than from an analysis of the learning tasks required to raise the functional level of the "trainable" child. When training institutions developed programs for the teacher of the "trainable," little content existed to provide the trainee with a substantial skill and knowledge base. Consequently, teachers have been ill prepared to make significant changes in their "trainable" pupils. The purpose of this component of the project is to develop a prototype training/retraining model for the teacher of the young "trainable retarded" child, utilizing Systematic Language Instruction (SLI) (Tawney and Hipsher, 1970), a newly developed curricula, and the application of the experimental analysis of behavior to the process of positive change in teacher behavior.

*Strategies*

Ten teachers of the young, trainable retarded child have been selected to participate in the Teacher Tutor program. These teachers are currently employed in the public schools in Kentucky, or are employed in day care centers sponsored by the Department of Mental Health. The Teacher Tutor program is conducted in two phases:

a. intensive training in the Programmed Environments project, working with children functioning at a higher level than those whose programming activities are described in objective 2.0.

b. in-field training in the teacher's own classroom, with the assistance of project staff (Teacher Tutors).

The specific steps are:

a. Initial training
   1. obtain SLI manual from teacher.
   2. study manual.
   3. view Teacher Tutor demonstration film Part I.

4. observe a Teacher Tutor with a child.
5. role play Master Lesson Plan: Ball.
6. role play MLP: Ball as a teacher with a Teacher Tutor.
7. teach a child using one designated SLI lesson plan.
8. teach one child on SLI language session using a minimum of 3 designated lesson plans.
9. teach at least 2 children in an SLI language session, using a minimum of 3 designated lesson plans.
10. video tape criterion performance.
11. view Teacher Tutor training film Part II.
12. evaluate the training procedure.

b. In-field training

Teacher Tutors accompany the trainee to her classroom where they:

1. assist in selecting SLI tasks for each child.
2. assist the teacher in rescheduling the school day around individualized tutorial instruction.
3. record teacher's behavior to insure that criterion performance is maintained.
4. establish a data collection system which enables project staff to receive copies of children's daily performance on SLI activites.

When teachers complete this program, they have, as noted above, demonstrated a high (90-100% correct) criterion performance on the content and procedures of the Systematic Language Instruction (SLI) program. Further, they will have developed programs of individualized tutorial instruction for each child in their class who is likely to benefit from the program, and may generalize the SLI teaching strategies to other areas of instruction.

*Status*

Staff were trained during fall semester 1972, and the prototype training model was implemented in February 1973. Teachers are currently in training and data is being collected on all phases of the training program. Strategies for expanding training activities are currently being written.

*Dissemination activities and materials*

1. Detailed information on the Teacher Tutor program and the Systematic Language instruction curriculum may be obtained from the author.

2. State department of education personnel, Department of Mental Health administrators, administrators of special education in local school district, and other personnel responsible for regional planning for services for the "young" trainable retarded child who would like to participate in the development and implementation of the Teacher Tutor program should contact the author at their earliest convenience.

3. A detailed plan for the second phase of this program is available from the author.

4. Data from the first phase of the project is available in report form.

*Objective 3.0. To list national research and curriculum development activities which relate to preschool children assumed to be severely retarded/multiply handicapped and to curriculum efforts for the young "trainable" retarded child*

*Rationale*

Current research activities with "severely retarded" children, and curriculum development activities for "severely retarded" and "trainable" retarded children tend to be conducted in isolation from each other. Except for a few highly visible projects, little appears to be known of ongoing projects, and subsequently, little dissemination of information among existing programs. The purpose of this component of the project is to identify existing projects, and then encourage the development of an information exchange network.

Professionals in special education who are knowledgeable in this area have been contacted and requested to supply the names of other persons, projects, or products in development. Follow-up requests will be initiated when the first set of responses here have been received and tabulated. Additional strategies will be implemented to insure that an exhaustive list has been obtained.

*Dissemination activities and materials*

1. Readers of this document who are aware of ongoing projects as described above should transmit that information to the author at their earliest convenience. Your responses will insure that the survey will be exhaustive.

*Objective 4.0. To develop competency based instructional modules for training/retraining staff for Programmed Environment Preschools for individuals assumed to be severely retarded*

*Rationale*

The competencies which are required to be an effective staff member

in a programmed environment are unknown at this time. Given the theoretical basis for program development, however, some general assumptions can be made. The most successful staff members may be those who:

1. modify their own behavior continuously, as their interactions with children are recorded.
2. can identify (or make fine grain analysis of) child behavior.
3. write, and follow behavior shaping programs for individual children.
4. task analyze child behaviors.
5. select and dispense appropriate reinforcers.
6. perform teaching behaviors as described in the *Systematic Language Instruction* manual.

Specific competencies, and strategies to teach those competencies will be identified during the course of the project.

Several assumptions will be set aside, and *will not* influence the development of competency based modules. These assumptions are:

a. a bachelor's degree is a prerequisite to staff competence.
b. certification requirement, e.g., hours completed in X area, are a prerequisite to staff competence.
c. differential staffing patterns are prerequisite to program development.

*Strategies*

Statements of teacher competence will be derived from observation of teacher-child interactions in the programmed environment setting, by teacher's analysis of their current and needed skills for successful child programming, and from lists of tasks necessary to complete staff-determined activities in the learning environment.

*Status*

The development of competency-based modules of instruction has been initiated.

*Dissemination materials and activities*

Lists of existing materials developed by other professionals, materials to be developed by this project, and likely completion dates for specified products in initial draft form are available.

SECTION IV

## SUMMARY AND PROSPECTS FOR THE FUTURE

*In this section one of the outstanding special educators of our time, Dr. Maynard Reynolds, explores some of the options in terms of a technical assistance system that will enable service and training to be provided to a broader range of individuals within the educational arean. Indication of forward steps in this direction have already been taken as exemplified by two new programs:*

*1. The Miami program, under the direction of Dr. Philip H. Mann, is a newly funded national program designed to identify exemplary educational delivery systems providing for improved programming for children with learning and/or behavioral disorders. Its primary function is that of an educational clearinghouse bringing together those who can provide services in this area with those who need these services. Training modules will be offered to those who train teachers at different levels in order to upgrade their skills and competencies.*

*2. The University of Connecticut Project, directed by Dr. John Cawley, will focus upon the administrators of large city school systems in order to develop better programs for handicapped children.*

## TECHNICAL ASSISTANCE: SOME POSSIBILITIES

MAYNARD C. REYNOLDS
*Professor, Special Education*
*and Director, Leadership Training Institute/Special Education*
*University of Minnesota*

The closing session of the Miami Conference on the special education problems of the Great Cities focused on two themes: (a) the need for a national technical assistance system to support the development of new special education programs in the Great Cities and (b) the advisability of persuading state educational regulatory bodies and to attend to and fund the special educational regulatory bodies to attend to and fund the special educa ion programs of the Great Cities separately and apart from other such programs in the states. Both themes, of course, arise out of the assumption underlying the conference. That is, that the educational problems of the Great Cities differ in quality and magnitude from those of less populous cities.

The concept of a Technical Assistance System is relatively new. It needs careful delineation before it can reach the planning stage at which support and assistance for its implementation can be sought. To stimulate the exploration and discussion of the system, I have outlined some ideas which, I hope, may be useful as starting points.

## Technical Assistance System

*Assumptions*

Several assumptions need to be stated at the outset:

1. That the field of special education is in the midst of important and necessary changes that will be particularly difficult to effect in the largest cities.

2. That *not* all of the resources required to support processes of change in big city special education programs are available locally and it is desirable for a central national agency to help mobilize technical assistance in the field of special education to the large city school systems.

3. That the institution of special education programs in school systems requires the understanding and cooperation of general educators, especially general administrators, as well as the expertise of special educators. Special educators are oriented to change in total school systems. They know the capability of a school system to accommodate to children's individual differences within the system as an alternative to strictly "set-aside" kinds of special education programs.

4. That the Great Cities of the United States are in great difficulty; that the schools of the cities are both a critical part of the problem and the promising points of entry for renewal efforts. The field of special education offers some of the values, knowledges, and skills that promise to be particularly useful in generating improvements in big city school systems.

## A Matrix Model

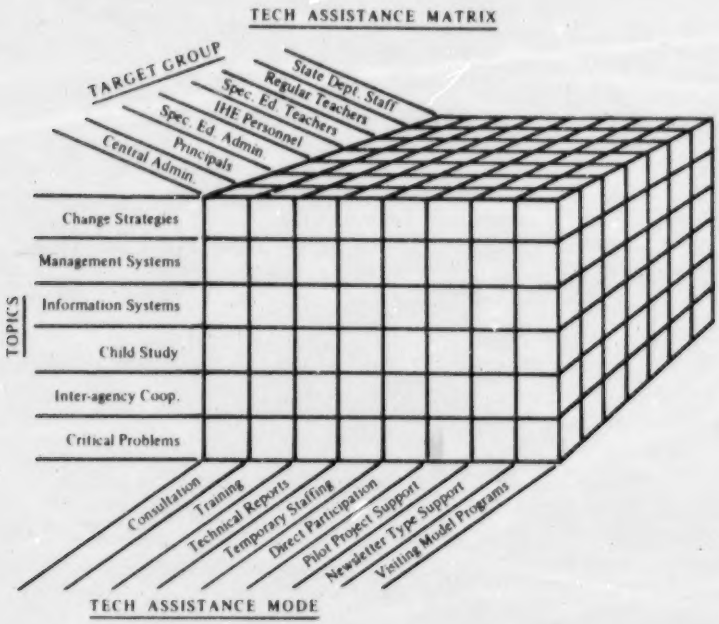
Presented below is a three-dimensional model which may be useful in thinking about:

(1) Modes of Technical Assistance (TA)–that is, methods by which TA may be offered offered;

(2) Topics of Concern–that is, the substantive areas in which 'outside' help may be needed;

(3) Target Groups–that is, what individuals or groups should be the object of TA provided or supported by an outside agency.

Each of the three dimensions is outlined below in an open system of categories. Blank spaces are meant to suggest the obvious incompleteness of the structure.




## 1. Modes of Technical Assistance

A great variety of procedures might be used to offer technical assistance. Listed below is a set of general categories and subcategories which may be useful in considering possibilities. The outline is by no means complete, but will be suggestive of some procedures now being used by emerging technical assistance agencies in the field of education.

1.1 *Consultation*

1.1.1 Short-term visit and consultation by member of the staff of the technical assistance agency

1.1.2 Short-term visit and consultation by an appropriate specialist or

agency employed by the technical assistance agency, upon agreement by all parties

1.1.3 Short-term consultation provided to a group of recipients from several agencies on the basis of some common problem or similarity of concern

1.1.4 Review and advice of documents or plans by specialists, without a field visit

1.1.5 . . . . . .

1.2 *Training*

1.2.1 Conduct of or support of training sessions of short or long duration arranged specifically for various individuals or groups. This might include: institutes, workshops, seminars, practicums, "packaged" presentations, courses, etc.

1.2.2 Support of individuals wishing to travel to and participate in established training programs

1.2.3 Support for enrichment or development of training resources and systems

1.2.4 . . . . . .

1.3 *Technical Reports*

1.3.1 Literature reviews on key topics

1.3.2 Service in conducting surveys or searches of critical domains

1.3.3 Periodic technical reports and summaries of emerging knowledge and practices on topics of importance to client agencies

1.3.4 Seeking for and assisting in development of reports from various agencies or experts which have promise of "pay-off" for client agencies

1.3.5 Drafting policy papers and/or supporting documentation

1.3.6 . . . . . .

1.4 *Temporary Staffing Help*

1.4.1 Temporary staffing by "outsiders" to conduct work requiring specialists not ordinarily needed or available, such as systems analysts

1.4.2 Provision of "project advocates"–i.e., outstanding staff members (perhaps counterpart agency officers in a comparable system) who would visit and provide general perspective and assistance

1.4.3 . . . . . .

1.5 *Direct Participation*

1.5.1 Occasional participation of "outsider" as negotiators in difficult or delicate situations or as interpretors to administrators, etc.

1.5.2 As hard-nosed evaluators-critic

1.5.3 . . . . . .

. . . . . .

1.6 *Pilot Project Support*

1.6.1 Assisting and supporting development of prototype programs

1.6.2 . . . . . .

. . . . . .

1.7 *Newsletter Type Support*

1.7.1 Assistance in "keeping up" with developments and products in other comparable agencies

1.7.2 Providing reliable and timely information on matters of legislation, regulation, court directives, etc.

1.7.3 . . . . . .

. . . . . .

1.8 *Visiting Model Programs*

1.8.1 Creating awarenesses of alternative approaches to issues or problems through visitations.

1.8.2 Creating awarenesses through support of trips and visits to specialized conferences

1.8.3 . . . . . .

. . . . . .

## 2. Topics of Concern

Listed below are six general topics which appear to be of high significance to administrators of special education programs in the large cities. These are some of the substantive areas in which "outside" technical assistance might be offered by a Technical Assistance System. Immediately following this list is a detailed breakdown of some of the particular kinds of activities which might be undertaken in the different areas.

It needs to be stressed that the orientation to be used here is an "external" one; the question is what are the topics on which one needs or could use substantial outside resources. The whole notion here is not to identify all topics of importance to the cities in the field of special education but only those which require help from an outside agency which might be created cooperatively with other big cities.

2.1 *Strategies for Change*

2.1.1 Planning process: Clarifying goals, objectives, responsibility and authority

2.1.2 Alternative change strategies

2.1.3 Needs assessment

2.1.4 Evaluation

2.1.5 . . . . . .

. . . . . .

2.2 *Management Systems*

2.2.1 Management decision making models

2.2.2 Finance and budgeting

2.2.3 Implications of decentralized management systems

2.2.4 Personnel management systems

2.2.5 Community advisory and policy groups

2.2.6 Program accountability

2.2.7 Systems for individualized instruction

2.2.8 Administration of in-service education

2.2.9 . . . . . .

. . . . . .

2.3 *Information Systems*

2.3.1 Intra-system and intra-staff communications

2.3.2 Inter-system communications

2.3.3 Information dissemination to community

2.3.4 Central pupil personnel records and accounting

2.3.5 Monitoring systems (pupil, teacher and administrator)

2.3.6 Ethics of information acquisition and exchange

2.3.7 Identification of exemplary models of practice and "current developments"

2.3.8 Accessing information networks

2.3.9 Providing instructional materials

2.3.10 Literature reviews on key topics including resources

2.3.11 . . . . . .

. . . . . .

2.4 *Child Study: Identification, Diagnosis, Prescription*

2.4.1 Changing models for diagnosis

2.4.2 Decategorizing and delabeling the system

2.4.3 Systems for identifying children with special needs

2.4.4 "Giving Away" (G. Miller's idea) testing and similar specialized functions

2.4.5 Developing the in-school learning center
2.4.6 Undoing the "waiting list" for diagnostic studies
2.4.6 Inter-professional cooperation in diagnosis
2.4.8 Case-management systems
2.4.9 . . . . . .
. . . . . .

2.5 *Interagency Cooperation*
2.5.1 Collaboration with Institutions of Higher Education
2.5.2 Collaboration with SEA's
2.5.3 Collaboration with suburban and regional agencies
2.5.4 Collaboration with community agencies
2.5.5 Collaboration with parent groups
2.5.6 Systems for surveying and cataloging community resources
2.5.7 "Due Process" negotiations with parents and community
2.5.8 . . . . . .
2.5.9 . . . . . .
. . . . . .

2.6 *Critical Problem Areas*
2.6.1 Educational Implications of Low Income
2.6.2 Educational Implications of Broken Families
2.6.3 Early Childhood Education for the Handicapped
2.6.4 Vocational (Career) Education for the Handicapped
2.6.5 Effects of State de-institutionalization policies
2.6.6 Educating severely handicapped children
2.6.7 Educating deaf children
2.6.8 Education of the gifted
2.6.9 Autistic children
2.6.10 Models for curriculum development
2.6.11 Emerging products from various schools
2.6.12 Instructional materials: systems for evaluation, acquisition and dissemination
2.6.13 "Due Process" requirements and procedures
2.6.14 Zero-Demission Commitments and Procedures
2.6.15 "Mainstreaming" Models
2.6.16 Certification of personnel
2.6.17 Special Education in "open schools"
2.6.18 Adapting Special Ecucation to IGE or other individualization systems
2.6.19 More relevant testing procedures

2.6.20 Policy implications of recent court decisions
2.6.21 Program Evaluation Systems
2.6.22 Documenting Program "Payoff"
2.6.23 Funding Patterns
2.6.24 Revising State Legislation
2.6.25 . . . . . .
. . . . . .

### 3. Target Groups

It is undoubtedly true that special education administrators need to address a variety of special target groups in order to achieve necessary changes and developments of programs. Following is a beginning outline of potential target groups. It is assumed that the Great City Administrators of Special Education is the primary client of the TA envisioned here, but attention then needs to go to his clients–including those listed here.

3.1 *Central Administrators*

3.2 *School Principals*
3.2.1 Elementary Principals
3.2.2 Secondary Principals

3.3 *Special Education Supervisors and Administrators*

3.4 *College and University (IHE) Personnel*

3.5 *Special Education Teachers*

3.6 *Regular Education Teachers*

3.7 *State Department of Education Staff*

3.8 *Pupil Personnel Workers*

3.9 *Community Personnel*
3.9.1 Parents of Handicapped Children
3.9.2 Community Agency Personnel

3.10 *School Board Members*

*The Matrix*

It may be possible to describe the operation of a Technical Assistance using the above three dimensions. As a beginning point, it would perhaps be useful to assign priorities to topics of concern; then to indicate preferred modes and targets of assistance. By aggregating responses from all cities, it would be possible to describe generally the kinds of resources and processes which would need to be provided by a Technical Assistance agency.

The matrix given below represents schematically the general elements of a TA system. Through the cooperation of administrators of the Great Cities, detailed statements of the kinds of needs they have could be entered into each cell.

By extending and using a detailed list of "topics of concern," modes of preferred technical assistance and "targets" as outlined above, hopefully it will be possible to initiate and develop a plan for a Technical Assistance Center to support the special education programs in the Great Cities. Such a plan will need to consider priorities of need and concern, the general ordering in time of various kinds of services which may be required, the kinds and amounts of resources required, what can be undertaken for groups of cities and what would need to be individually tailored–plus many other topics.

## The Technical Assistance Center

On the basis of my experience with the Leadership Training Institute, I believe that a Technical Assistance Center should have thin staffing at its host institution and that it should call in part-time specialists from wherever they may be found in support of particular projects as a complementary weighting. Thus, discussions of technical assistance resources should, I think, envision a widely open set of persons and other resources that can be rallied from many places to support particular needs. This strategy also accords with the notion that a Technical Assistance Center should always be ad hoc in spirit–willing to live on soft funds, for example, and always seek to support the permanent and essential structures in its field, rather than to be the source of a new level of administration or bureaucracy.

A related assumption is that a TA Center serving the Great Cities should make maximum use of other agencies that offer technical assistance. For example, it might be anticipated that such existing centers as the IMC/RMC headquarters, the Center on Law and Education of the

Handicapped, the Regional Resource Centers funded by BEH, and others would be called upon systematically.

Obviously, the TA Center needs to restrict its attention to items or activities of highest priority that clearly involve "outside" resources. The TA Center should do only those things which the cities themselves cannot do.

Although no data are yet available to document the point, it can be anticipated, I believe, that a very strong case can be made for a Technical Assistance System as an economy measure. In the long run, it seems likely that it would cost the country less money if the Great Cities worked through a Technical Assistance System than if each city worked alone on a trial and error basis in approaching its most difficult problems.

One of the hazards of a TA Center is that it will become just another source of funds, to be appropriately "hustled." A strong arrangement for policy determination and monitoring the the TA Center is necessary to define and restrict functioning to selected high priority activities.

### Great Cities as Unique Units

The second major topic discussed at the closing session of the Miami Conference, besides Technical Assistance, was concerned with the need to persuade State Departments of Education to treat the Great Cities as "individuals"–at least for a period of time–in regulations and funding. This concern developed, in part, from the belief that the Great Cities are faced with a tremendous problem of changing over, during the next few years, to accommodate the thrusts represented in the "right to education," "due process," "decategorizing," and "mainstreaming" movements. Especially since direct development money seems harder than ever to get from the federal government, it seems essential for states to be willing to free both regulations and funds for the cities during the period of rapid change.

It was argued by some, at the Miami Conference, that the Great Cities are not unique units and that they would neither deserve nor profit from specialized efforts on their behalf. No doubt it is true that children in the cities are "wired up" about the same as other children. But there can be little doubt, it seems to me, that a very high proportion of children in the cities are deeply disturbed by the conditions of racism, poverty and general deterioration in many cities. It is also a fact that smaller communities and rural areas tend to deliver their most complex problems, those requiring comprehensive and expensive treatment programs, to the largest cities.

But clearest of all, it seems, is the difficulty that derives simply from the magnitude of the problems of changeover in school systems of the Great Cities. Forces for change, such as the deinstitutionalization and objectism by minority group parents to special class arrangements for "retarded" children create tremendous problems in large organizations. The Great Cities, I assume, will need and deserve all the specialized help which can be rallied to their support; for, if they do not succeed in serving well their children, who can predict a worthy future–for them or for others.

I assume that states will be persuaded to deal with the Great Cities in more flexible ways only if they are presented with carefully developed plans for the changeover period–and here is where Technical Assistance becomes enjoined once again. If the Great Cities give highest concern and attention to careful planning, perhaps the state education agencies will enter with flexibility and support.

Too little has been said here of institutions of higher education and of the U.S. Office of Education; but in that best of worlds they too will respond to the needs of the Great Cities at their creative best and in their most generous and flexible modes.

Appendix

# CONFERENCE EVALUATION SUMMARY

BRUCE BALOW
*Department of Special Education*
*University of Minnesota*

The purposes of the conference were:

1. To focus on and educate participants about three major issues in education of handicapped children.
2. To acquaint participants with selected instructional products or models now in use in various parts of the country.
3. To improve communication within states among SEA, IHE, and large city special education personnel.
4. To afford opportunity for state education agency, local education agency, and college and university personnel to plan active and immediate approaches in seeking solutions to critical special education needs in large city school systems.

In a span of two and one-half days the conference participants, numbering approximately 200 persons, reviewed problems of inter-agency coordination and related issues on the right to education, observed demonstration models relating to that issue, and discussed the issue in groups. The same format was followed for the second issue of personnel preparation and the third issue on decategorization. Separate meetings of professional groups (SEA, IHE, LEA, Urban Rural, Trend) and meetings of within state groups to plan next steps were also scheduled throughout the conference.

The evaluation design included pre- and post-conference assessments, with intent to compare pre- and post-conference judgments for each individual, thus providing a measure of the amount of change that occurred in the participants. It was not possible to analyze the data according to that design because of the limited number of individuals who completed both forms. The post-conference evaluative judgments are described below.

*Overall Evaluation*

It would appear that the respondents judged the four objectives to be

well begun if not completely or outstandingly fulfilled. They seemed to be fired up about change, that is, more willing to actively seek and bring about change in their own activities, in particular to increase the amount of communication and cooperation occurring between IHE, SEA, and LEA. The issue papers were well received. The conference organization was judged to be good to excellent with disclaimers on scheduling and pre-conference information. Specifically, many respondents felt the scheduling was too tight, too much in too little time, and would have preferred to receive pre-conference information earlier, although the nature and amount of that information seemed to be quite satisfactory.

Most respondents felt that within state communication was improved quite considerably during the conference but the number of specific plans for near-term action was quite limited. In the main, actions planned were in the nature of joint meetings when people returned home. The main barriers to close cooperation among SEA, IHE, and LEA personnel in relation to the large cities included lack of time and the nature of closed bureaucratic systems, with time getting the most mention. Given the power, what changes would these respondents make? The answers are as varied as the number of respondents.

Specific evaluation data can be obtained upon request from Bruce Balow, Department of Special Education, University of Minnesota, Minneapolis.